



(<http://ipindia.nic.in/index.htm>)



(<http://ipindia.nic.in/index.htm>)

Patent Search

Invention Title	A CLOUD COMPUTING BASED DECENTRALIZED BLOCKCHAIN NETWORK FOR SECURE DATA SHARING		
Publication Number	14/2024		
Publication Date	05/04/2024		
Publication Type	INA		
Application Number	202441025050		
Application Filing Date	28/03/2024		
Priority Number			
Priority Country			
Priority Date			
Field Of Invention	COMMUNICATION		
Classification (IPC)	H04L0009320000, H04L0009080000, G06F0021620000, G06F0021600000, H04L0009060000		
Inventor			
Name	Address	Country	Nationality
Dr.C.S.Boopathi	Associate Professor, Department of EEE, SRM Institute of Science and Technology, Kattankulathur, Chengalpattu District, Tamil Nadu, India, Pin Code:603203	India	India
Dr.Maithili Arjunwadkar	Director & Professor, Department of MCA, Progressive Education Society's Modern Institute of Business Studies, Sector 21, Modern Education Campus, Yamunanagar, Nigdi, Pune, Maharashtra, India, Pin Code:411044	India	India
Mr.Gajanan Badhe	Assistant Professor, Progressive Education Society's Modern Institute of Business Studies, Sector 21, Modern Education Campus, Yamunanagar, Nigdi, Pune, Maharashtra, India, PinCode:411044	India	India
Mrs.Bharati Mahadev Ramageri	Assistant Professor, Progressive Education Society's Modern Institute of Business Studies, Sector 21, Modern Education Campus, Yamunanagar, Nigdi, Pune, Maharashtra, India, Pin Code:411044	India	India
Ms.Rashmi K. Dixit	Assistant Professor, Department of Computer Science & Engineering, Walchand Institute of Technology, Solapur, Maharashtra, India, Pin Code:413006	India	India
Mrs.C.Radhika	Assistant Professor, Department of ECE, Institute of Aeronautical Engineering, Dundigal, Hyderabad, Telangana, India, Pin Code:500090	India	India
Dr.Sivaram Rajeyyagari	Associate Professor, Department of Computer Science, College of Computing and Information Technology, Shaqra University, Shaqra, Saudi Arabia, Po.Box:11961	Saudi Arabia	Saudi Arabia
Dr.Ramesh Kumar Yadav	Assistant Professor, FST, The ICFAI University Raipur, Chhattisgarh, India, Pin Code:490042	India	India
Mr.Khan Asif Rashid	Lecturer, Department of Computer Science, College of Computing and Information Technology, Shaqra University, Shaqra, Saudi Arabia, Po.Box:11961	Saudi Arabia	Saudi Arabia
Dr.Dasari Vijaya Kumar	Adjunct Professor, Department of Environmental Sciences, Andhra University, Visakhapatnam, Andhra Pradesh, India, Pin Code:530003	India	India
Applicant			

Name	Address	Country	Nationality
Dr.C.S.Boopathi	Associate Professor, Department of EEE, SRM Institute of Science and Technology, Kattankulathur, Chengalpattu District, Tamil Nadu, India, Pin Code:603203	India	India
Dr.Maithili Arjunwadkar	Director & Professor, Department of MCA, Progressive Education Society's Modern Institute of Business Studies, Sector 21, Modern Education Campus, Yamunanagar, Nigdi, Pune, Maharashtra, India, Pin Code:411044	India	India
Mr.Gajanan Badhe	Assistant Professor, Progressive Education Society's Modern Institute of Business Studies, Sector 21, Modern Education Campus, Yamunanagar, Nigdi, Pune, Maharashtra, India, PinCode:411044	India	India
Mrs.Bharati Mahadev Ramageri	Assistant Professor, Progressive Education Society's Modern Institute of Business Studies, Sector 21, Modern Education Campus, Yamunanagar, Nigdi, Pune, Maharashtra, India, Pin Code:411044	India	India
Ms.Rashmi K. Dixit	Assistant Professor, Department of Computer Science & Engineering, Walchand Institute of Technology, Solapur, Maharashtra, India, Pin Code:413006	India	India
Mrs.C.Radhika	Assistant Professor, Department of ECE, Institute of Aeronautical Engineering, Dundigal, Hyderabad, Telangana, India, Pin Code:500090	India	India
Dr.Sivaram Rajeyyagari	Associate Professor, Department of Computer Science, College of Computing and Information Technology, Shaqra University, Shaqra, Saudi Arabia, Po.Box:11961	Saudi Arabia	India
Dr.Ramesh Kumar Yadav	Assistant Professor, FST, The ICFAI University Raipur, Chhattisgarh, India, Pin Code:490042	India	India
Mr.Khan Asif Rashid	Lecturer, Department of Computer Science, College of Computing and Information Technology, Shaqra University, Shaqra, Saudi Arabia, Po.Box:11961	Saudi Arabia	India
Dr.Dasari Vijaya Kumar	Adjunct Professor, Department of Environmental Sciences, Andhra University, Visakhapatnam, Andhra Pradesh, India, Pin Code:530003	India	India

Abstract:

[031] This invention presents a novel system and method for secure data sharing utilizing a cloud computing based decentralized blockchain network. It integrates the scalability and flexibility of cloud computing with the security and decentralization of blockchain technology, creating a robust platform for secure and efficient data exchange. The network facilitates encrypted data transactions, ensuring integrity and confidentiality through advanced cryptographic techniques. Designed to overcome the limitations of traditional data sharing methods, this system provides a solution for secure communication in various sectors, including finance, healthcare, and government. The decentralized architecture not only enhances security by eliminating single points of failure but also ensures transparency and trust among participants. This abstract highlights the invention's contributions to improving data sharing mechanisms through a combination of cloud computing and blockchain technologies, offering a scalable, secure, and decentralized solution. Accompanied Drawing [FIGS. 1-2]

Complete Specification

Description:[001] The present invention relates to the fields of cloud computing, blockchain technology, and cybersecurity, specifically focusing on secure data sharing mechanisms across decentralized networks. It combines advanced cloud computing infrastructures with blockchain's inherent security and decentralization features to offer a robust solution for secure and efficient data sharing across various sectors. This invention is particularly relevant in industries requiring high levels of data integrity, privacy, and availability, such as financial services, healthcare, supply chain management, and governmental data operations.

[002] The invention addresses critical challenges in these fields, including but not limited to, data breaches, unauthorized access, data tampering, and the inefficiencies associated with centralized data management systems. By leveraging the scalability and resource management capabilities of cloud computing, along with the security, transparency, and immutability characteristics of blockchain technology, this invention proposes a novel approach to data sharing that ensures data integrity, confidentiality, and accessibility.

[003] Furthermore, the invention is positioned at the intersection of distributed computing and cryptographic security, incorporating elements of consensus algorithms, smart contracts, and encryption methodologies to facilitate secure, transparent, and auditable data transactions without the need for centralized authority. This amalgamation of technologies aims to revolutionize how data is shared and managed across decentralized networks, ensuring that data remains secure, private, and tamper-proof, while still being easily accessible to authorized parties.

BACKGROUND OF THE INVENTION

[004] In recent years, the exponential growth of digital data has highlighted the critical need for secure and efficient data sharing mechanisms across various sectors, including finance, healthcare, and government services. Traditionally, data sharing and storage solutions have relied heavily on centralized systems, which, while efficient

[View Application Status](#)



Terms & conditions (<http://ipindia.gov.in/terms-conditions.htm>) Privacy Policy (<http://ipindia.gov.in/privacy-policy.htm>) Copyright (<http://ipindia.gov.in/copyright.htm>)
Hyperlinking Policy (<http://ipindia.gov.in/hyperlinking-policy.htm>) Accessibility (<http://ipindia.gov.in/accessibility.htm>) Archive (<http://ipindia.gov.in/archive.htm>)
Contact Us (<http://ipindia.gov.in/contact-us.htm>) Help (<http://ipindia.gov.in/help.htm>)

Content Owned, updated and maintained by Intellectual Property India, All Rights Reserved.

Page last updated on: 26/06/2019