



## Patent Search

Invention Title	Data Security in Wireless network Security using the Modified Cryptography Algorithm
Publication Number	44/2021
Publication Date	29/10/2021
Publication Type	INA
Application Number	202141046168
Application Filing Date	11/10/2021
Priority Number	
Priority Country	
Priority Date	
Field Of Invention	COMMUNICATION
Classification (IPC)	H04W0084180000, H04L0009300000, H04L0009060000, H04L0029060000, C21D0009000000

### Inventor

Name	Address
Dr. Allam Balaram	Professor, Department of Information Technology, MLR Institute of Technology, Secunderabad, Telangana – 500040, India
Dr. N. Murali Krishna	Professor, Department of Computer Science and Engineering, Vignan Institute of Technology and Science, Deshmuki Village, Yadadri Bhuvanagiri, Telangana – 508284, India
Dr. Shaik Abdul Nabi	Professor and HOD, Department of Computer Science and Engineering, Sreyas Institute of Engineering and Technology, Bandlaguda Nagole, Hyderabad, Telangana – 500068, India
Mr. Mohd Anwar Ali	Assistant Professor, Department of Computer Science and Engineering, Ellenki College of Engineering and Technology, Patelguda, Telangana – 502319, India
Revathi Durgam	Research Scholar, Department of Computer Science and Engineering, VIT-AP, Amaravati, Andhra Pradesh – 522237, India
Dr. D B K Kamesh	Professor, Department of CSE, Malla Reddy Engineering College for Women, Secunderabad, Telangana – 500100, India
Dr P. Chandana	Associate Professor, Department of Computer Science and Engineering, Institute of Aeronautical Engineering, Dundigal, Hyderabad, Telangana – 500043, India
Dr. P. Kiran Kumar	Professor, Department of Computer Science and Engineering, Vignan Institute of Technology and Science, Deshmuki Village, Yadadri Bhuvanagiri, Telangana -508284, India

### Applicant

Name	Address
Dr. Allam Balaram	Professor, Department of Information Technology, MLR Institute of Technology, Secunderabad, Telangana – 500040, India
Dr. N. Murali Krishna	Professor, Department of Computer Science and Engineering, Vignan Institute of Technology and Science, Deshmuki Village, Yadadri Bhuvanagiri, Telangana – 508284, India
Dr. Shaik Abdul Nabi	Professor and HOD, Department of Computer Science and Engineering, Sreyas Institute of Engineering and Technology, Bandlaguda Nagole, Hyderabad, Telangana – 500068, India
Mr. Mohd Anwar Ali	Assistant Professor, Department of Computer Science and Engineering, Ellenki College of Engineering and Technology, Patelguda, Hyderabad, Telangana – 502319, India
Revathi Durgam	Research Scholar, Department of Computer Science and Engineering, VIT-AP, Amaravati, Andhra Pradesh – 522237, India
Dr. D B K Kamesh	Professor, Department of CSE, Malla Reddy Engineering College for Women, Secunderabad, Telangana – 500100, India
Dr P. Chandana	Associate Professor, Department of Computer Science and Engineering, Institute of Aeronautical Engineering, Dundigal, Hyderabad, Telangana – 500043, India
Dr. P. Kiran Kumar	Professor, Department of Computer Science and Engineering, Vignan Institute of Technology and Science, Deshmuki Village, Yadadri Bhuvanagiri, Telangana -508284, India

#### Abstract:

The wireless sensor network has become popular because it provides an economically practical answer to a multitude of real-world challenges. Data energy use are not currently addressed in the present systems. In an ongoing project, the designers are using a novel hashing technique to create a new algorithm with the aim of increasing wireless network security. This technique incorporates various encryption standards, including AES, DES, and RSA, into the network. The algorithm is carried out in three steps, each of which is occurring at the same time. In the first one-third of the message, AES is applied to the first third of the message in part 2. In the final segment of this series, updated RSA is applied to the last one-third of the message.

#### Complete Specification

- Claims:1. In this research work, two algorithms have been designed which enhances the security of data.  
 2. Modified Cryptography has been proposed that is the combination of three existing algorithms and runs in parallel.  
 3. A Hashing Technique has been proposed to enhance the integrity of data over the network.  
 4. It has been analysed that proposed hashing technique is better among all in terms of execution time and security level.

, Description:Technical field of invention:

The security mechanisms developed for WSN are classified into two broad categories:

i) Low level security mechanism

• Key establishment

The keys are established among all the sensor nodes to exchange data securely. They do not allow unauthorized nodes to establish communication. They support node extent from hundreds or thousands of sensor nodes.

• Privacy and authentication protocols

Cryptographic techniques provide privacy to the data and allow authorized users to access the data.

• Secure routing

The current routing protocols used in wireless networks are susceptible to spoofing attack, relay routing information and selective forwarding. So

[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.

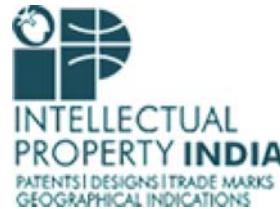
Page last updated on: 26/06/2019



Office of the Controller General of Patents, Designs & Trade Marks  
Department of Industrial Policy & Promotion,  
Ministry of Commerce & Industry,  
Government of India

सत्यमेव जयते

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



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

#### Application Details

APPLICATION NUMBER	202141046168
APPLICATION TYPE	ORDINARY APPLICATION
DATE OF FILING	11/10/2021
APPLICANT NAME	<p>1 . Dr. Allam Balaram 2 . Dr. N. Murali Krishna 3 . Dr. Shaik Abdul Nabi 4 . Mr. Mohd Anwar Ali 5 . Revathi Durgam 6 . Dr. D B K Kamesh 7 . Dr P. Chandana 8 . Dr. P. Kiran Kumar</p>
TITLE OF INVENTION	Data Security in Wireless network Security using the Modified Cryptography Algorithm
FIELD OF INVENTION	COMMUNICATION
E-MAIL (As Per Record)	soni.mukesh15@gmail.com
ADDITIONAL-EMAIL (As Per Record)	
E-MAIL (UPDATED Online)	
PRIORITY DATE	
REQUEST FOR EXAMINATION DATE	--
PUBLICATION DATE (U/S 11A)	29/10/2021

## Application Status

APPLICATION STATUS

# Awaiting Request for Examination

[View Documents](#)

→ Filed → Published → RQ Filed → Under

Examination → Disposed

In case of any discrepancy in status, kindly contact [Ipo-helpdesk@nic.in](mailto:ipo-helpdesk@nic.in)