

(54) Title of the invention : Blockchain and Cloud computing based Criminal Digital Forensic Investigation and Prediction using Artificial Intelligence and Machine learning algorithms

(51) International classification :H04L0009320000, H04L0029060000, H04L0029080000, H04L0009060000, G06F0021640000

(86) International Application No :PCT//
Filing Date :01/01/1900

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA
Filing Date :NA

(62) Divisional to Application Number :NA
Filing Date :NA

(71)Name of Applicant :
1)Dr. A. Bhuvaneshwari
 Address of Applicant :Professor Department of Information Technology Adhiparasakthi Engineering College, Melmaruvathur, Chengalpattu District - 603 319, Tamilnadu, India. -----

2)Dr S. Sakthitharan
3)Manoj Kumar Yadav
4)Subhashini S
5)Shailendra Pratap Singh
6)M.Valarmathi MCA., M.Phil.
7)Mr. Jonnala Subba Reddy
8)Alpesh Vaghela
9)Dr. Anilkumar Suthar
10)Dr. Brijesh Sathian
11)Jitendra Kurmi
12)Dr Nallam Krishnaiah
 Name of Applicant : NA
 Address of Applicant : NA

(72)Name of Inventor :
1)Dr. A. Bhuvaneshwari
 Address of Applicant :Professor Department of Information Technology Adhiparasakthi Engineering College, Melmaruvathur, Chengalpattu District - 603 319, Tamilnadu, India. -----

2)Dr S. Sakthitharan
 Address of Applicant :Assistant Professor Department of Computer Science Lakshmi Bangaru Arts and Science College, Melmaruvathur , 603319, Tamilnadu, India. -----

3)Manoj Kumar Yadav
 Address of Applicant :Assistant Professor Department of Mechanical Engineering, Inderprastha Engineering College, 63, Site-IV, Sahibabad Industrial Area, Sahibabad, Ghaziabad, Uttar Pradesh., 201010, India. -----

4)Subhashini S
 Address of Applicant :Assistant Professor Department of Computer Science and Engineering, BSA Crescent Institute of Science and technology, Vandalur, Chennai – 600048, Tamilnadu, India. -----

5)Shailendra Pratap Singh
 Address of Applicant :Professor Department of Mechanical Engineering Inderprastha Engineering College, 63, Site-IV, Sahibabad Industrial Area, Sahibabad, Ghaziabad, 201010, Uttar Pradesh, India. -----

6)M.Valarmathi MCA., M.Phil.
 Address of Applicant :Assistant Professor & H.o.D Vivekanandha Arts and Science College for Women, Veerachipalayam , Sankari West Post, Sankari Taluk, 637 303. Salem Dist, Tamilnadu, India. -----

7)Mr. Jonnala Subba Reddy
 Address of Applicant :Associate Professor Department of Mechanical Engineering, Lakireddy Bali Reddy College of Engineering, Mylavaram (A) Andhra Pradesh, 521230, India -----

8)Alpesh Vaghela
 Address of Applicant :Programmer, GMB Polytechnic Address- Rajula, Dist. Amreali, Gujarat, India. -----

9)Dr. Anilkumar Suthar
 Address of Applicant :Director New LJ Institute of Engineering and Technology, S.G.Highway, Ahmedabad, Gujarat, India. -----

10)Dr. Brijesh Sathian
 Address of Applicant :Scientist, Geriatrics and Long term care Department, Rumailah Hospital, Hamad Medical Corporation, Doha, Qatar, P. O BOX 3050, Doha, Qatar -----

11)Jitendra Kurmi
 Address of Applicant :Ph.D Research scholar Department of computer science, Lucknow university, Lucknow, Uttar Pradesh, India -----

12)Dr Nallam Krishnaiah
 Address of Applicant :Professor Department of IT, St.Martin's Engineering College Dhulapally, Secunderabad Telangana ,India -----

(57) Abstract :
 Blockchain and Cloud computing based Criminal Digital Forensic Investigation and Prediction using Artificial Intelligence and Machine learning algorithms Abstract: Blockchain technology has garnered considerable attention in recent years. Numerous studies on the use of blockchain technology have been conducted. Additional research is necessary before it can be fully exploited. The term blockchain technology refers to a particular type of technology. Due to the decentralised nature of blockchain technology, all users will benefit from increased transparency and security. They are stored on the blockchain in a way that prevents them from being altered or hacked, as they are replicated and distributed across a network of computers. In Digital Forensics, tools, methods, and procedures for working with blockchain-based platforms have not yet been developed (DF). In today's forensics, obtaining, identifying, evaluating, and analysing evidence is difficult. Additionally, it makes it more difficult to preserve and present evidence. Due to the decentralisation of the blockchain, private data can be stored on the blockchain's nodes in a peer-to-peer network. Additionally, it is extremely simple and straightforward to use for the Department of Defense. This is because it satisfies their cross-jurisdictional requirements for evidence integrity and provenance. When blockchain technology becomes available, conducting cross-border digital forensics investigations will become easier and safer.