(21) Application No.202141035771 A

(19) INDIA

(22) Date of filing of Application:07/08/2021

(43) Publication Date: 13/08/2021

(54) Title of the invention: A NOVEL BIG DATA PROCESSING SYSTEM WITH CLUSTERING AND DATA SECURITY IN CLOUD ENVIRONMENT

	(51) International classification (31) Priority Document No (32) Priority Date (33) Name of priority country (86) International Application No Filing Date (87) International Publication No (61) Patent of Addition to Application Number Filing Date (62) Divisional to Application Number Filing Date	:H04L0029060000, G06F0016220000, G06F0016182000, G06F0015160000 :NA :NA :NA :NA :PCT/// :01/01/1900 : NA :NA :NA :NA	(71)Name of Applicant: 1)Dr.K.Suresh Babu Address of Applicant: HoD-Department of Computer Science & Engineering, RISE Krishna Sai Prakasam Group of Institutions Ongole, Andhra Pradesh, India. Pin Code: 523001 Andhra Pradesh India 2)Dr.E.Vamsidhar 3)Dr.D.V.V.S Phani Kumar 4)Mrs.Y.Madhavi Latha 5)Mrs.K.Anitha 6)Mr.V.Rajasekhar 7)Mr.Vaka Suresh 8)Mrs.K.Srividya 9)Mr.Raja Bhargava 10)Mr.G.Kishore (72)Name of Inventor: 1)Dr.K.Suresh Babu 2)Dr.E.Vamsidhar 3)Dr.D.V.V.S Phani Kumar 4)Mrs.Y.Madhavi Latha 5)Mrs.K.Anitha
Filing Date :NA 3)Dr.D.V.V.S Phani Kumar (62) Divisional to Application Number :NA 4)Mrs.Y.Madhavi Latha	(61) Patent of Addition to Application	:NA	1)Dr.K.Suresh Babu
	Filing Date		3)Dr.D.V.V.S Phani Kumar
6)Mr.V.Rajasekhar			5)Mrs.K.Anitha
			8)Mrs.K.Srividya 9)Mr.Raja Bhargava 10)Mr.G.Kishore

(57) Abstract:

As technology advances and network applications are used more frequently, the web service system's performance improves. Data analysis techniques required a large quantity of storage space as well as a high-security system to deal with this. Because the web service system's technologies are behind the developments in terms of data retrieval speed and data security. The Major Challenges in the Big Data Processing System in the cloud environment are Big Data Handling, Speed of Data Processing and, Security. The present invention disclosed herein is a Novel Big Data Processing System with Clustering and Data Security in Cloud Environment comprising of: User Request (101); Encryption (102,108); Server (103); Database (104); Clustering (105); Distance (106); Similarity (107); Decryption (109); provides the security for the user requested data and Big Data stored in the Cloud after efficient clustering. The present invention disclosed herein performs three major operations comprising of Collaborative filtering in preprocessing, Agglomerative Clustering to manage the data in the form of hierarchical arrangement with proper indexing, and ElGamal for encryption and decryption. The current invention's Big Data Processing System has been tested on the Hadoop platform, which includes Java script in the JDK 1.7 compiler platform. Eclipse Europa is the IDE that is being used for the java script, and the database that is being used as the backend is Wamp server 2.0 with MySQL database. The invention is 96 percent accurate, and retrieving query data from the database takes 13 milliseconds.

No. of Pages: 16 No. of Claims: 9