(12) PATENT APPLICATION PUBLICATION

(21) Application No.202311058828 A

(19) INDIA

(22) Date of filing of Application :01/09/2023

(43) Publication Date : 06/10/2023

(54) Title of the invention : INTELLIGENT INDEXING SYSTEM FOR MESSAGING CONVERSATIONS WITH MULTI-LEVEL HIERARCHICAL GROUPING

(51) International classification :G06F0040300000, G06Q0050000000, G06N0020000000, G06F0016332000, G06F0016350000	(71)**Name of Applicant :**
	  1)**Chitkara University**
	    Address of Applicant :Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Patiala ----------- -----------
	  2)**Bluest Mettle Solutions Private Limited**
	Name of Applicant : NA
	Address of Applicant : NA

(86) International Application No :NA Filing Date :NA	

(87) International Publication No : NA	(72)**Name of Inventor :**
	  1)**MISHRA, Rahul**
	Address of Applicant :ODC-4, Panchshil Tech Park, inside Courtyard by Marriott premises, Hinjewadi Phase - 1, Pune - 411057, Maharashtra, India. Pune ----------- -----------
	  2)**SINGH, Dhiraj**

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

(62) Divisional to Application Number :NA
    Filing Date :NA
	Address of Applicant :ODC-4, Panchshil Tech Park, inside Courtyard by Marriott premises, Hinjewadi Phase - 1, Pune - 411057, Maharashtra, India. Pune ----------- -----------
	  3)**MANTRI, Archana**
	Address of Applicant :Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Patiala ----------- -----------

(57) Abstract :
The system in the present disclosure is a sophisticated platform that revolutionizes the way messaging conversations are indexed (104) and organized. In the context of ever-increasing communication volumes and complexities, traditional indexing (104) methods fall short in providing efficient information retrieval and contextual understanding. To address these challenges, the system leverages the power of Natural Language Processing (NLP) and Artificial Intelligence (AI) techniques to intelligently index (104) messaging conversations. The system begins by collecting messaging conversations from diverse sources, including chat platforms, email clients, and social media channels. Through a comprehensive preprocessing phase, the data is cleaned, pre-processed and using cutting-edge NLP algorithms (112), the system performs semantic analysis to decipher the meaning and intent behind the messages, going beyond mere keyword matching. Utilizing advanced topic modeling and clustering techniques, the system identifies main topics and themes within the conversations and the creation of a multi-level hierarchical structure which allows users to navigate through conversations seamlessly, gaining insights into broader topics and exploring specific subtopics

No. of Pages : 30 No. of Claims : 10