(19) INDIA

(22) Date of filing of Application :05/09/2023

(43) Publication Date: 06/10/2023

(54) Title of the invention: SYSTEM FOR SECURELY GENERATING AND MANAGING SALT VALUES FOR PASSWORD ENCRYPTION AND METHOD THEREOF

:H04L0009080000, H04L0009320000, (51) International H04L0009060000, H04L0009000000, classification G06F0021310000 (86) International :NA Application No :NA Filing Date (87) International : NA Publication No (61) Patent of Addition :NA to Application Number :NA Filing Date (62) Divisional to :NA **Application Number** :NA Filing Date

(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 (72)Name of Inventor: 1)MISHRA, Saket

Address of Applicant :ODC-4, Panchshil Tech Park, inside Courtyard by Marriott premises, Hinjewadi Phase - 1, Pune -

411057, Maharashtra, India. Pune -----

2)SINGH, Dhiraj

Address of Applicant :ODC-4, Panchshil Tech Park, inside Courtyard by Marriott premises, Hinjewadi Phase - 1, Pune - 411057, Maharashtra, India. Pune -------

3)PANDA, Surya Narayan

Address of Applicant :Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India Patiala ------

(57) Abstract:

The present disclosure relates generally to field of cyber security. More specifically the present invention relates to a system for securely generating and managing salt values for password encryption. The system (100) includes a processor (102), a memory (104), a salt value generator (106), a password encryption device (108), a salt management device (110), a password strength checker (114), a password reset unit (118) and a log unit (120). The salt value generator (106) is configured to generate a cryptographically secure random salt value for each password. A password encryption device (108) is embedded with encryption algorithm to encrypt passwords. Further the present invention relates to a method for securely generating and managing salt values for password encryption. Advantageously, the present invention relates to a more secure method for encrypting passwords by using per-password salt values, which are unique to each password and stored alongside the encrypted password

No. of Pages: 19 No. of Claims: 8