



(51) International Patent Classification:

G06F 21/31 (2013.01) *G06F 21/36* (2013.01)
H04L 29/06 (2006.01)

(21) International Application Number:

PCT/IB2015/053080

(22) International Filing Date:

28 April 2015 (28.04.2015)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

2247/DEL/2014 7 August 2014 (07.08.2014) IN

(71) Applicant: THE REGISTRAR, GRAPHIC ERA UNIVERSITY [IN/IN]; 566/6, Bell Road, Clement Town, Uttarakhand, Dehradun 248002 (IN).

(72) Inventors: GOYAL, Puneet; Dept. Of Computer Science & Engg., Graphic Era University, 566/6, Bell Road, Clement Town, Uttarakhand, Dehradun 248002 (IN).

KHANNA, Nitin; Dept. Of Electronics & Communication Engg., Graphic Era University, 566/6, Bell Road, Clement Town, Uttarakhand, Dehradun 248002 (IN).

(74) Agents: **MAJUMDAR, Subhatosh** et al.; S. MAJUMDAR & CO., 5, Harish Mukherjee Road, West Bengal, Kolkata 700 025 (IN).

(81) **Designated States** (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JP, KE, KG, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) **Designated States** (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH,

[Continued on next page]

(54) Title: A SYSTEM AND METHOD FOR SECURITY ENHANCEMENT

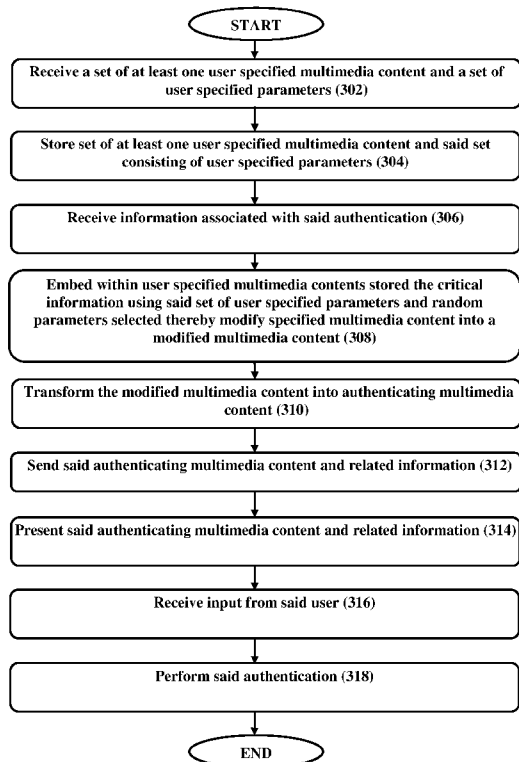


FIGURE 3

(57) **Abstract:** A system and method thereof for secure authentication using multimedia contents set particular to user (MCSPU) and user specified parameters is disclosed. A host system (106) for performing an authentication with a user system (102) is disclosed. The host system (106) comprises of a processor (202); and a memory (206) coupled to said processor (202) for executing a plurality of modules present in said memory (206). For the authentication (while logging in or performing a transaction), the host system would provide to the user one or more elements belonging to MCSPU, after embedding, within the elements the authentication related critical information using the user specific parameters. The proposed method ensures the user that the response is coming from authentic system. In case of suspicious user behavior, the parameters or multimedia contents not specific to the user could be used.



GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

- *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*
- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

Published:

- *with international search report (Art. 21(3))*