

(51) International Patent Classification:
H04L 9/08 (2006.01)(21) International Application Number:
PCT/US2012/037353(22) International Filing Date:
10 May 2012 (10.05.2012)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
13/104,535 10 May 2011 (10.05.2011) US(71) Applicant (for all designated States except US): **SOFT-LAYER TECHNOLOGIES, INC.** [US/US]; 4849 Alpha Road, Dallas, TX 75244 (US).(72) Inventor: **LEE, Chang**; 924 Sloan Drive, Allen, TX 75013 (US).(74) Agent: **GAMBINO, Darius C.**; DLA Piper LLP (US), One Liberty Place, 1650 Market Street, Suite 4900, Philadelphia, PA 19103 (US).

(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, 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, IS, JP, KE, KG, KM, KN, KP, KR,

KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, 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, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, 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, 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))

— before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))

(88) Date of publication of the international search report:

10 May 2013

(54) Title: SYSTEM AND METHOD FOR WEB-BASED SECURITY AUTHENTICATION

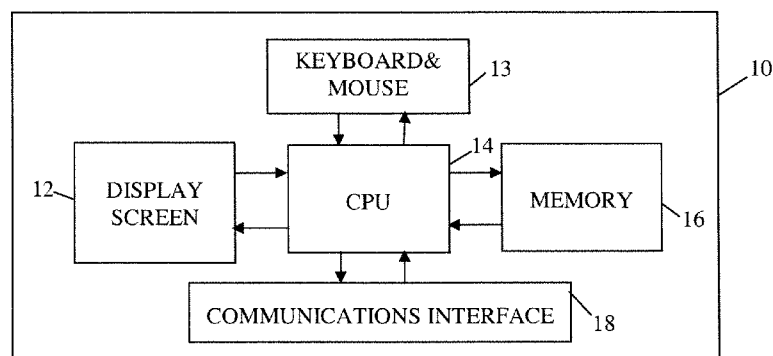


FIG. 1

(57) Abstract: A security authentication method comprises establishing a user account associated with a login credential, generating an encryption salt, generating graphical key images of a plurality of sequences of values each beginning at a random point, generating encrypted key values by encrypting each value in the plurality of sequences using the generated encryption salt, incorporating the graphical key images and encrypted key values into a displayable input form, receiving user input including a plurality of encrypted key values, generating decrypted key values by decrypting the encrypted key values of the user input using the encryption salt, and verifying that the decrypted key values match the login credential.