

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
2 May 2008 (02.05.2008)

PCT

(10) International Publication Number
WO 2008/051905 A2

(51) International Patent Classification:
H04L 9/00 (2006.01)

(21) International Application Number:
PCT/US2007/082088

(22) International Filing Date: 22 October 2007 (22.10.2007)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
11/552,555 25 October 2006 (25.10.2006) US

(71) Applicant: **SYMPHERLOCK TECHNOLOGY CORPORATION** [—/US]; 1261 Post Road, 3rd Floor, Fairfield, CT 06824 (US).

(71) Applicants and

(72) Inventors: **SITAR, Paul** [US/US]; 63 Jockey Hollow Road, Monroe, CT 06468 (US). **FLANAGIN, George, Kelly** [US/US]; 1901 Woodbine Road, Richmond, VA 23225 (US). **GINZBURG, Lev** [US/US]; 16 Brotherton Avenue, Rockaway, NJ 07866 (US).

(74) Agent: **ZIEGLER, Geza, C., Jr.**; Perman & Green, LLP, 425 Post Road, Fairfield, CT 06824 (US).

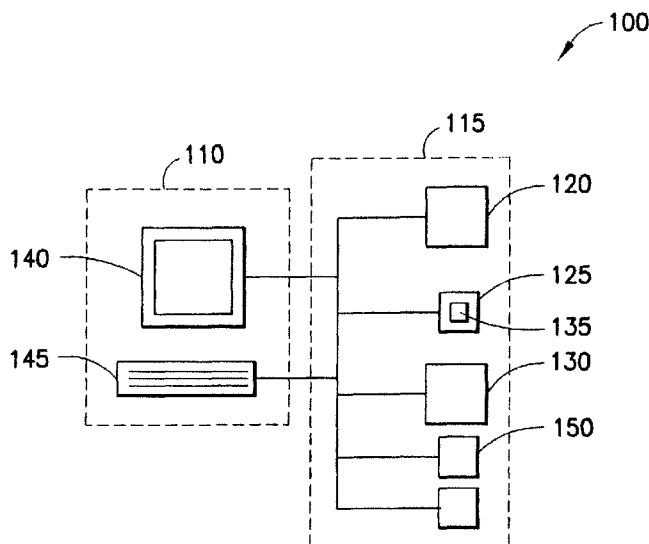
(81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, 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, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, 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, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— *without international search report and to be republished upon receipt of that report*

(54) Title: USER AUTHENTICATION SYSTEM AND METHOD



(57) Abstract: A method of authenticating a user for access includes creating an authentication key in the form of a user formula selected from a set of variables and operations provided by the authentication system, storing the user formula in the authentication system, utilizing a display to present the user with an arrangement of variables generated by the authentication system including the variables of the user formula, each assigned a value, applying the assigned values to matching variables in the user formula and calculating a first result, interspersing one or more additional characters among the characters of the first result, and conveying the first result with the additional characters to the authentication system. The authentication system authenticates the user if the number of additional characters conveyed with the first result is below a predetermined threshold and the first result matches a second result of a separate and independent calculation of the user formula by the authentication system.

WO 2008/051905 A2