

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
2 October 2008 (02.10.2008)

PCT

(10) International Publication Number
WO 2008/119050 A3

(51) International Patent Classification:
H04L 29/06 (2006.01)

(21) International Application Number:

PCT/US2008/058503

(22) International Filing Date: 27 March 2008 (27.03.2008)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

60/908,271 27 March 2007 (27.03.2007) US

11/844,855 24 August 2007 (24.08.2007) US

(71) Applicant (for all designated States except US): **QUALCOMM INCORPORATED** [US/US]; Attn: International IP Administration, 5775 Morehouse Drive, San Diego, California 92121 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **ROSE, Gregory Gordon** [AU/US]; 5775 Morehouse Drive, San Diego, California 92121 (US). **XIAO, Lu** [CA/US]; 5775

Morehouse Drive^{*}, San Diego, California 92121 (US). **JULIAN, David Jonathan** [IN/US]; 5775 Morehouse Drive, San Diego, California 92121 (US).

(74) Agent: **KIM, Won Tae**; Attn: International IP Administration, 5775 Morehouse Drive, San Diego, CA 92121 (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, 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),

[Continued on next page]

(54) Title: SYNCHRONIZATION TEST FOR DEVICE AUTHENTICATION

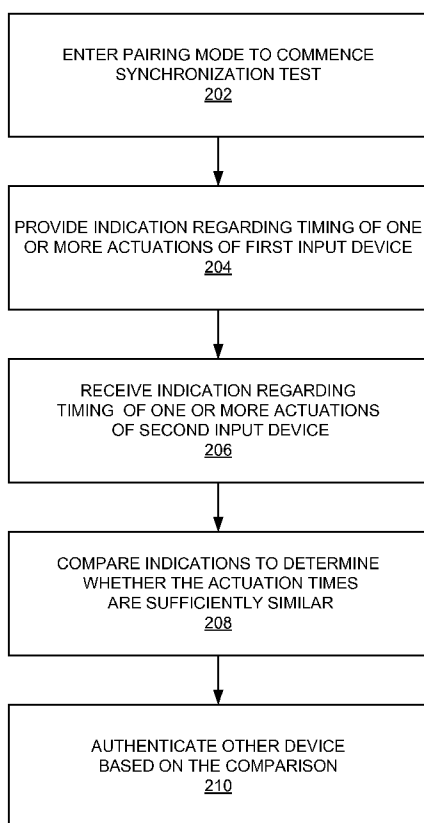


FIG. 2

(57) Abstract: Device authentication is based on the ability of a human to synchronize the movements of his or her fingers. A pairing procedure for two wireless devices may thus involve a synchronization test that is based on the relative timing of actuations of input devices on each of the wireless devices. In some aspects a synchronization test involves determining whether actuations of user input devices on two different wireless devices occurred within a defined time interval. In some aspects a synchronization test involves comparing time intervals defined by multiple actuations of user input devices on two wireless devices.

WO 2008/119050 A3



European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, 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*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

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

22 May 2009