

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
17 May 2001 (17.05.2001)

PCT

(10) International Publication Number
WO 01/35580 A1

(51) International Patent Classification⁷: H04L 12/28

(74) Agents: WADSWORTH, Philip, R. et al.; Qualcomm Incorporated, 5775 Morehouse Drive, San Diego, CA 92121-1714 (US).

(21) International Application Number: PCT/US00/30834

(22) International Filing Date:
9 November 2000 (09.11.2000)

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW.

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
09/437,417 10 November 1999 (10.11.1999) US

(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

(71) Applicant: QUALCOMM INCORPORATED [US/US];
5775 Morhouse Drive, San Diego, CA 92121-1714 (US).

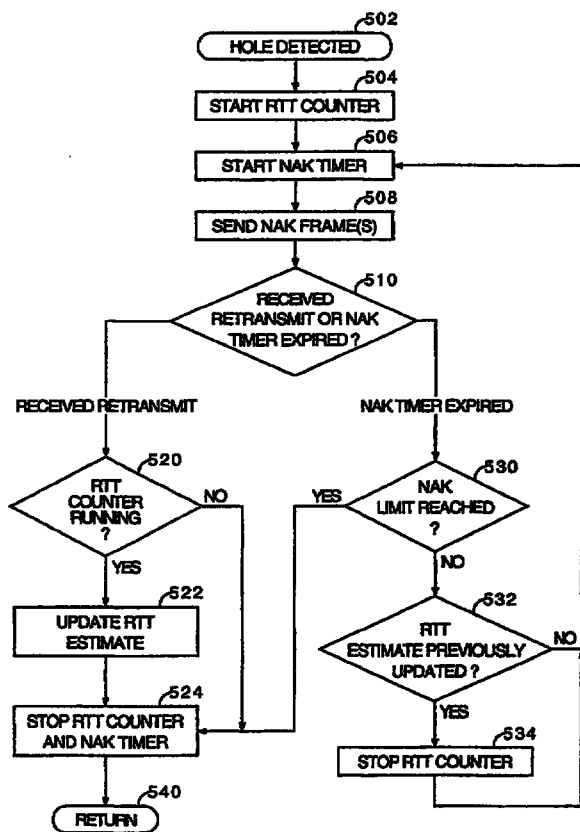
Published:

— With international search report.

(72) Inventors: ABROL, Nischal; 7260 Calle Cristobal #41,
San Diego, CA 92126 (US). LEUNG, Nikolai, K., N.;
2542 Wakefield Street, Arlington, VA 22207 (US).

[Continued on next page]

(54) Title: RADIO LINK PROTOCOL ENHANCEMENTS TO REDUCE SETUP TIME FOR DATA CALLS



(57) Abstract: An improved method and system for determining round-trip time (RTT) during a radio link protocol (RLP) wireless communication link. The RTT estimate is negotiated by both sides of the RLP communication link without the need for the 3-way handshake generally required for RLP synchronization. The method includes techniques used by both sides of the RLP communication link to dynamically update and refine their initial, negotiated RTT estimates.

WO 01/35580 A1



— *Before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments.*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.