

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
18 September 2008 (18.09.2008)

PCT

(10) International Publication Number
WO 2008/112314 A1

(51) International Patent Classification:
H04L 5/02 (2006.01)

(74) Agent: **BALLARINI, Robert, J.**; Volpe And Koenig, P.C., United Plaza, Suite 1600, 30 S. 17th Street, Philadelphia, Pennsylvania 19103 (US).

(21) International Application Number:
PCT/US2008/003454

(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.

(22) International Filing Date: 14 March 2008 (14.03.2008)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/894,709 14 March 2007 (14.03.2007) US
60/895,470 18 March 2007 (18.03.2007) US

(71) Applicant (for all designated States except US): **INTER-DIGITAL TECHNOLOGY CORPORATION** [US/US]; 3411 Silverside Road, Concord Plaza, Suite 105, Hagley Building, Wilmington, Delaware 19810 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **GRIECO, Donald, M.** [US/US]; 18 Shore Road, Manhasset, NY 11030 (US). **ZHANG, Guodong** [CN/US]; 490 Main Street, Apt. C8, Farmingdale, New York 11735 (US). **OLESEN, Robert, L** [US/US]; 3 Country Club Drive, Huntington, New York 11743 (US). **TSAI, Allan, Y.** [US/US]; 10 Jolie Court, Booton, New Jersey 07005 (US).

(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, 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).

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

(54) Title: TRANSMISSION OF ACK/NACK AND TRANSMIT POWER CONTROL FEEDBACK IN EVOLVED UTRA

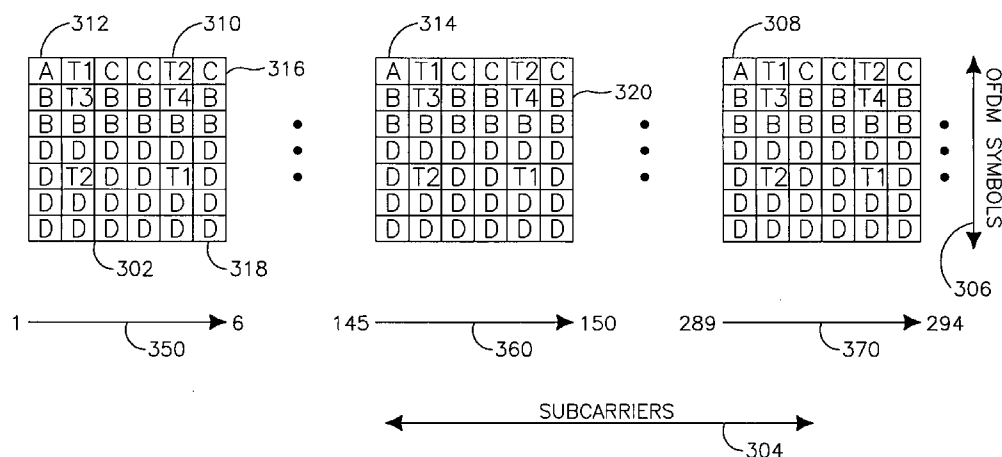


FIG.3

(57) Abstract: A method for transmitting feedback information for a wireless transmit receive unit (WTRU) includes multiplexing the feedback information with an uplink shared channel, mapping the multiplexed feedback information to OFDM symbols and transmitting the feedback information to an e Node B (eNB). The method also includes multiplexing the feedback information with the uplink shared channel using distributed frequency division multiplexing (FDM), mapping the feedback information to a first orthogonal frequency division multiplex (OFDM) symbol, and distributing the mapped feedback information equidistantly across the transmission bandwidth.