

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
25 September 2008 (25.09.2008)

PCT

(10) International Publication Number
WO 2008/115837 A1

(51) International Patent Classification:

H04L 1/00 (2006.01) **H04L 1/18** (2006.01)
H04L 1/16 (2006.01)

(21) International Application Number:

PCT/US2008/057160

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

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

60/895,454 17 March 2007 (17.03.2007) US
12/047,562 13 March 2008 (13.03.2008) US

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(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, 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, 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))

[Continued on next page]

(54) Title: CONFIGURABLE ACKNOWLEDGEMENT PROCESSING IN A WIRELESS COMMUNICATION SYSTEM

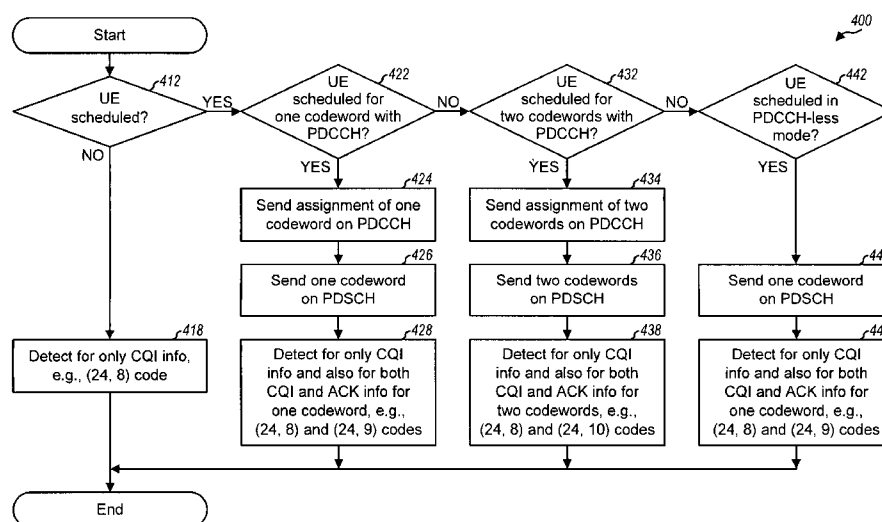


FIG. 4

(57) Abstract: Techniques for sending and receiving acknowledgement (ACK) information in a wireless communication system are described. A base station sends control information and data to a user equipment (UE) and receives ACK information from the UE. The base station performs detection for the ACK information based on (i) a first hypothesis for the control information being missed by the UE and (ii) a second hypothesis for the control information being received correctly by the UE. In one design, the ACK information may have a variable size, and the base station may perform detection for the ACK information based on different block codes for the first and second hypotheses. In another design, the ACK information may have a fixed size, and the base station may perform detection for the ACK information based on a single block code and obtain a fixed number of bits for the ACK information for both hypotheses.

WO 2008/115837 A1



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*