(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
14 January 2010 (14.01.2010)

PCT

(10) International Publication Number
WO 2010/006300 A3

(51) International Patent Classification:
H04B 7/02 (2006.01) *H04W 72/08* (2009.01)
H04B 1/10 (2006.01) *H04B 7/06* (2006.01)
H04B 1/707 (2006.01)

(21) International Application Number:
PCT/US2009/050304

(22) International Filing Date:
10 July 2009 (10.07.2009)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
61/080,065 11 July 2008 (11.07.2008) US
12/498,468 7 July 2009 (07.07.2009) 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, CL, 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, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, 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, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, SM, 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 (Art. 21(3))*

— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*

(88) Date of publication of the international search report:
29 April 2010

(54) Title: METHOD AND APPARATUS FOR USING UPLINK CONTROL INFORMATION FOR INTER-CELL DECODING AND INTERFERENCE CANCELLATION

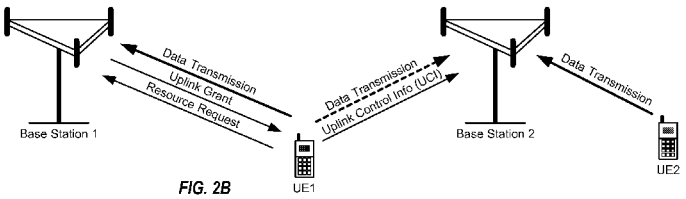

FIG. 2B

(57) Abstract: Techniques for supporting data transmission on the uplink in a wireless network are described. In an aspect, a user equipment (UE) may send a data transmission to a serving base station and may send uplink control information (UCI) to a non-serving base station. The UCI may include pertinent information to allow the non-serving base station to process the data transmission from the UE. In one design, the UCI may allow the non-serving base station to estimate the interference due to the data transmission from the UE and to cancel the interference at the non-serving base station. The interference cancellation may improve the received signal quality at the non-serving base station. After the interference cancellation, the non-serving base station may process a data transmission from another UE served by the base station.

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