



- (51) **International Patent Classification:**
H04W 72/08 (2009.01)
- (21) **International Application Number:**
PCT/US2009/051756
- (22) **International Filing Date:**
24 July 2009 (24.07.2009)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**
61/083,848 25 July 2008 (25.07.2008) US
61/108,272 24 October 2008 (24.10.2008) US
12/505,117 17 July 2009 (17.07.2009) US
- (71) **Applicant (for all designated States except US):** **QUALCOMM INCORPORATED** [US/US]; Attn: International IP Administration, 5775 Morehouse Drive, San Diego, CA 92121 (US).
- (72) **Inventors; and**
- (75) **Inventors/Applicants (for US only):** **GUPTA, Rajarshi** [IN/US]; 5775 Morehouse Drive, San Diego, CA 92121 (US). **TINNAKORNSRISUPHAP, Peerapol** [TH/US]; 5775 Morehouse Drive, San Diego, CA 92121 (US). **AGASHE, Parag, A.** [US/US]; 5775 Morehouse Drive, San Diego, CA 92121 (US). **CATOVIC, Amer** [BA/US]; 5775 Morehouse Drive, San Diego, CA 92121 (US).
- (74) **Agent:** **CORIE, Florin, C.**; 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, 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).

[Continued on next page]

(54) **Title:** CELL IDENTIFIER ASSIGNMENT AND SELECTION

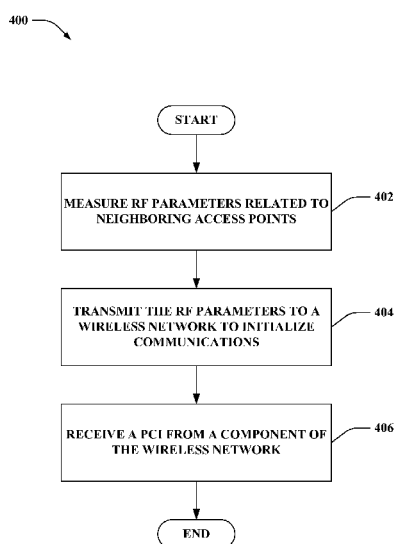


FIG. 4

(57) **Abstract:** Systems and methodologies are described that facilitate providing physical cell identifier (PCI) assignment. Neighboring access point parameters can be collected and transmitted to a PCI assigning component, which can generate a PCI based on the parameters as well as other local parameters. The neighboring access point parameters can be received by evaluating signals transmitted by the neighboring access points, from a UE communicating with the neighboring access points, over a backhaul link, etc. The parameters can include signal strength, identification, and/or the like. In addition, prioritized lists of PCIs can be provided to an access point, which can utilize the neighborhood parameters to select an optimal PCI from the list.

**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))*