

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

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
5 April 2012 (05.04.2012)

(10) International Publication Number
WO 2012/044337 A1

PCT

(51) International Patent Classification:
H04B 1/715 (2011.01) **H04L 27/26** (2006.01)

(21) International Application Number:
PCT/US2010/058379

(22) International Filing Date:
30 November 2010 (30.11.2010)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
61/389,051 1 October 2010 (01.10.2010) 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, TH, 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, LR, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AL, 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, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report (Art. 21(3))

(54) Title: FREQUENCY-HOPPING METHOD FOR LTE APERIODIC SOUNDING REFERENCE SIGNALS

(57) Abstract: A methodology that enables narrowband aperiodic sounding and frequency hopping through the use of additional RRC configuration, thus requiring little or no additional LI overhead to support narrowband frequency hopping for aperiodic sounding transmissions. More specifically, a simple approach for extending the LTE periodic sounding reference signal methodology to include aperiodic sounding. One benefit of the proposed technique is that it enables each UE to perform aperiodic channel sounding in every sounding subframe using a frequency-hopped approach where the sounding bandwidth of the UE can be narrowed appropriately to match its link capability. Additional benefits of the new approach include better resource utilization, lower signaling overhead, faster channel information update rates, and lower blocking probabilities.



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