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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
22 September 2005 (22.09.2005)

PCT

(10) International Publication Number
WO 2005/088922 A1

(51) International Patent Classification[7]: H04L 27/00, 27/20

(21) International Application Number: PCT/US2005/007113

(22) International Filing Date: 4 March 2005 (04.03.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/550,463 4 March 2004 (04.03.2004) US

(71) Applicant *(for all designated States except US)*: QUALCOMM INCORPORATED [US/US]; 5775 Morehouse Drive, San Diego, California 92121 (US).

(72) Inventor; and

(75) Inventor/Applicant *(for US only)*: YU, Zhi Zhong [GB/US]; 5775 Morehouse Drive, San Diego, California 92121 (US).

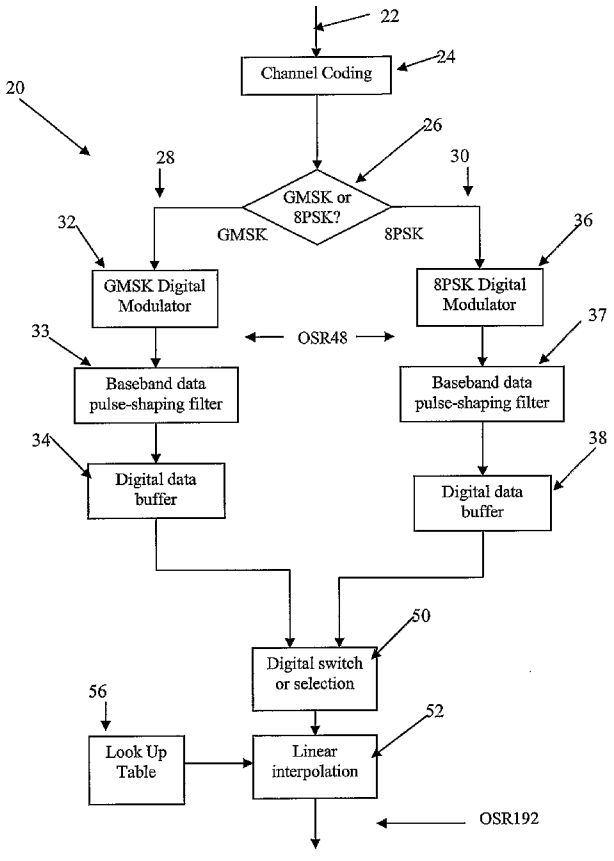
(74) Agents: WADSWORTH, Philip R. et al.; 5775 Morehouse Drive, San Diego, Califonia 92121 (US).

(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, 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,

[Continued on next page]

(54) Title: A METHOD OF AND AN APPARATUS FOR EFFECTING A SMOOTH TRANSITION BETWEEN ADJACENT SYMBOL BURSTS TRANSMITTED IN DIFFERENT MODULATION FORMATS



(57) Abstract: A smooth transition is effected between adjacent digital information bursts transmitted in different modulation formats by selecting a first sequence for a first digital symbol burst to be transmitted, which first sequence comprises a set of end symbols with a first particular symbol pattern. A second sequence for a second digital symbol burst is also selected for transmission after the first digital symbol burst, which second sequence comprises a set of start symbols with a second particular symbol pattern. The first digital symbol burst is modulated in a first modulation format and the second digital symbol burst is modulated in a second modulation format different than the first modulation format. Thereafter, the modulated first and second digital symbol bursts are transmitted. The transmission of the second digital symbol burst starts upon completion of the transmission of the first digital information symbol at an instant so selected that transmission of the end set of bits of the first code sequence is synchronized in time with the start set of bits of the second code sequence.

WO 2005/088922 A1

FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, 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)) for all designations*

— *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for all designations*

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*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.