

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
18 November 2004 (18.11.2004)

PCT

(10) International Publication Number
WO 2004/100423 A2

- (51) International Patent Classification⁷: **H04L**
- (21) International Application Number:
PCT/US2004/012698
- (22) International Filing Date: 23 April 2004 (23.04.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
10/427,537 30 April 2003 (30.04.2003) US
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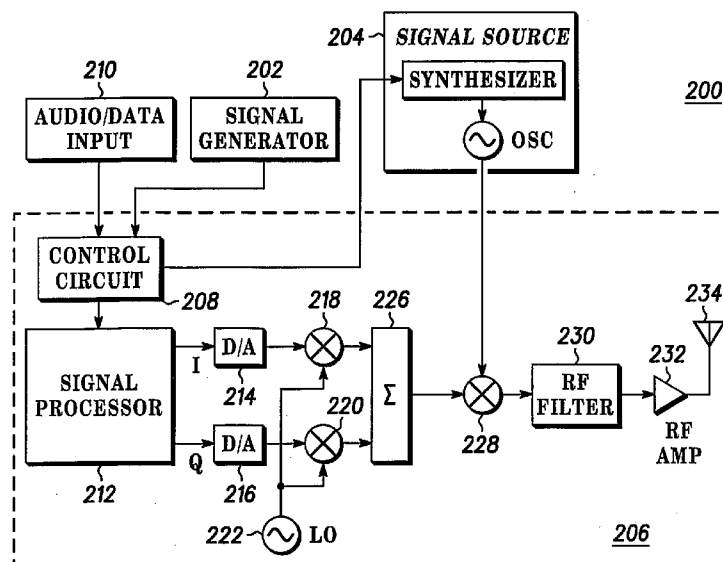
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, 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, 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, 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, HU, IE, IT, 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).

Published:

— without international search report and to be republished upon receipt of that report

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.

(54) Title: METHOD AND WIRELESS DEVICE EMPLOYING A PREAMBLE TO INITIATE COMMUNICATIONS



(57) Abstract: A wireless receiver 300 and corresponding method to detect a message identifier or preamble that has been generated and provided by a transmitter 200 uses FFTs to estimate frequency and time offset. The wireless receiver 300 scans, asynchronously and sequentially during a wakeup time, a plurality of predetermined frequencies for the message identifier or specialized preamble. A plurality of received sample sequences are collected, one received sample sequence collected at each of the plurality of predetermined frequencies. A correlation between data corresponding to the preamble and data corresponding to a received sample sequence is compared to a threshold value to determine when the preamble has been detected. The wireless receiver 300 is wakened from a low power mode when the preamble is detected.

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