

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
11 October 2007 (11.10.2007)

PCT

(10) International Publication Number
WO 2007/115128 A3

(51) International Patent Classification:
H04B 1/30 (2006.01)

LS, LT, LU, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(21) International Application Number:
PCT/US2007/065549

(22) International Filing Date: 29 March 2007 (29.03.2007)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
11/395,397 31 March 2006 (31.03.2006) US

(71) Applicant (for all designated States except US):
WIQUEST COMMUNICATIONS, INC. [US/US];
915 Enterprise Blvd., Allen, TX 75013 (US).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **JOSEPH, Brian C.**
[US/US]; 4906 East View Ct., McKinney, TX 75070 (US).

(74) Agents: **O'DELL, David M.** et al.; Haynes and Boone,
LLP, 901 Main Street, Suite 3100, Dallas, TX 75202 (US).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BH, 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, GT, HN, HR, HU, ID, IL, IN,
IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR,

(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, HU, IE, IS, IT, LT, LU, LV, MC, MT, 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))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))
- of inventorship (Rule 4.17(iv))

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

(88) Date of publication of the international search report:
29 November 2007

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: UWB RADIO INTERFACE WITH DC OFFSET

(57) Abstract: The present invention provides a method and apparatus for correcting direct current (DC) offsets in radio output signals. The invention comprises a radio processor and a baseband processor. During a calibration routine, the baseband processor measures DC offset produced by the radio processor, generates a corresponding DC offset correction value, and writes the correction value to a discrete memory in the radio processor via a serial processor interface. During a subsequent normal receive operation, the radio processor reads the DC offset correction value from memory and feeds it into a digital to analog converter to produce an analog signal that in turn is fed into a radio receive path to nullify undesired DC offset.



WO 2007/115128 A3

INTERNATIONAL SEARCH REPORT

International application No
PCT/US2007/065549

A. CLASSIFICATION OF SUBJECT MATTER INV. H04B1/30		
According to International Patent Classification (IPC) or to both national classification and IPC		
B. FIELDS SEARCHED		
Minimum documentation searched (classification system followed by classification symbols) H04B		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal, WPI Data		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 654 593 B1 (SIMMONS SEAN [CA] ET AL) 25 November 2003 (2003-11-25) column 3, line 16 - column 4, line 25 -----	1-11
X	US 6 240 100 B1 (RIORDAN KENNETH B [US] ET AL) 29 May 2001 (2001-05-29) column 4, line 66 - column 6, line 53; figure 3 -----	1-11
A	EP 0 719 013 A (AT & T CORP [US]) 26 June 1996 (1996-06-26) column 5, line 18 - column 6, line 22; figures 1,3 -----	1-11
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input checked="" type="checkbox"/> See patent family annex.		
* Special categories of cited documents : *A* document defining the general state of the art which is not considered to be of particular relevance *E* earlier document but published on or after the international filing date *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) *O* document referring to an oral disclosure, use, exhibition or other means *P* document published prior to the international filing date but later than the priority date claimed *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. *&* document member of the same patent family		
Date of the actual completion of the international search 11 September 2007		Date of mailing of the international search report 18/09/2007
Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016		Authorized officer Andersen, Jan

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2007/065549

Patent document cited in search report	Publication date	Patent family member(s)	Publication date	
US 6654593	B1	25-11-2003	CA 2360266 A1	30-04-2002
			US 2004053586 A1	18-03-2004

US 6240100	B1	29-05-2001	NONE	

EP 0719013	A	26-06-1996	CA 2161167 A1	21-06-1996
			JP 8242262 A	17-09-1996
			US 5724653 A	03-03-1998
