## (19) World Intellectual Property Organization

International Bureau





PCT

## (43) International Publication Date 12 October 2006 (12.10.2006)

(51) International Patent Classification: *H04B 1/10* (2006.01) *H04L 1/00* (2006.01)

(21) International Application Number:

PCT/US2006/012444

**(22) International Filing Date:** 4 April 2006 (04.04.2006)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

11/099,229 5 April 2005 (05.04.2005) US

(71) Applicant (for all designated States except US): L-3 IN-TEGRATED SYSTEMS COMPANY [US/US]; 10001 Jack Finney Blvd., Greenville, Texas 75402 (US).

(72) Inventor; and

(75) Inventor/Applicant (for US only): STANNERS, Steven, P. [US/US]; 9702 Shoal Creek Drive, Rowlett, Texas 75089 (US).

(74) Agent: ENDERS, William, W.; O'Keefe, Egan & Peterman, LLP, 1101 Capital Of Texas Highway South, Suite C-200, Austin, Texas 78746 (US).

(10) International Publication Number WO 2006/107932 A3

(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, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, 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, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, 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).

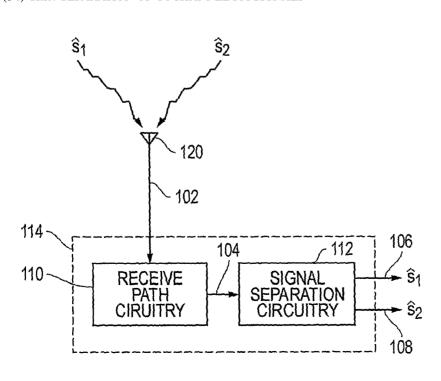
## Published:

with international search report

(88) Date of publication of the international search report: 22 March 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: SEPARATION OF COCHANNEL FM SIGNALS



(57) Abstract: Multiple cochannel FM signals received, for example, in an overloaded signal environment may be separated using parallel interference cancellation techniques.



WO 2006/107932 A3 |||||||||||||

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/US06/12444

A. CLASSIFICATION OF SUBJECT MATTER IPC: H04B 1/10( 2006.01);H04L 1/00( 2006.01)			
USPC: 455/290,294,295,296,304;375/344,345,346 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) U.S.: 455/290,294,295,296,304;375/344,345,346			
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 practicable, search terms used)			
C. DOCT	UMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where a	propriate, of the relevant pass	ages Relevant to claim No.
Y	US 6,847,688 B1 (MOLNAR et al) 25 January 200	5 (25.01.2005), whole docume	nt. 1-5, 7-23, 25-33
Y	US 5,995,567 (CIOFFI et al) 30 November 1999 (30.11.1999), whole document.		1-5, 7-23, 25-33
Y	US 5,697,086 (SVOBODA) 09 December 1997 (09.12.1997), whole document.		1-5, 7-23, 25-33
Y	US 5,307,517 (RICH) 26 April 1994 (26.04.1994), whole document.		1-5, 7-23, 25-33
Further	documents are listed in the continuation of Box C.	See patent family ar	nnex.
Special categories of cited documents:  "A" document defining the general state of the art which is not considered to be of particular relevance		"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 clair considered novel or cannot be considered when the document is taken alone		not be considered to involve an inventive step	
"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)		"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	
"O" document referring to an oral disclosure, use, exhibition or other means obvious to a person skilled in the art  "P" document published prior to the international filing date but later than the "&" document member of the same patent family			ed in the art
priority date claimed			
-		Date of mailing of the international search report  21 SEP 2006	
30 August 2006 (30.08.2006)  Name and mailing address of the ISA/US  Authorized officer			
Mail Stop PCT Attn: ISA/IIS			
Commissioner for Patents P.O. Box 1450 Pablo N. Tran			
Alexandria, Virginia 22313-1450  Facsimile No. (571) 273-3201  Telephone No. (866)217-9197			
Form PCT/ISA/210 (second sheet) (April 2005)			