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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
2 December 2004 (02.12.2004)

PCT

(10) International Publication Number
WO 2004/105264 A3

(51) International Patent Classification[7]: H04B 1/707

(21) International Application Number:
PCT/CA2004/000757

(22) International Filing Date: 21 May 2004 (21.05.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/472,789 23 May 2003 (23.05.2003) 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.

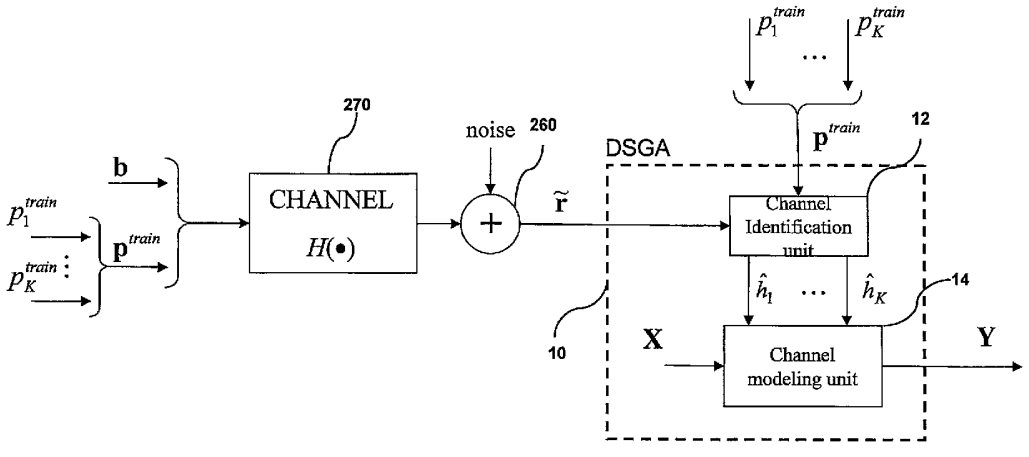
(84) Designated States *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, 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:
— *with international search report*

(88) Date of publication of the international search report:
22 September 2005

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: SYSTEM FOR EQUALISATION USING PILOT CANCELLATION



(57) Abstract: An adaptive procedure that optimizes the parameters of a receiver filter such as a Multiuser Detection (MUD) applied to Direct-Sequence Code Division Multiple Access (DS-CDMA) is disclosed. This procedure takes into account the constraints imposed by the absence of training data sequences sent by the transmitter and required to adapt the filter parameters at the receiver. The adaptation consists in using two distinct data sequences transmitted through the same channel; one data sequence is transmitted as payload data and a second data sequence is transmitted as training data used to adapt the filter parameters at the receiver. Parameters of the receiver filter are adapted in presence of varying channels at the same time as the data information sequences are transmitted. The adaptation is realized following a mixed adaptation procedure based on a direct (without channel identification) and indirect (with channel identification) scheme. The invention is described for UMTS (Universal Mobile Telecommunications System) application in cellular communications system.

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INTERNATIONAL SEARCH REPORT

International Application No
PCT/CA2004/000757

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H04B1/707

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)
IPC 7 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, PAJ, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 98/43362 A (YELLIN DANIEL ; DSPC ISRAEL LTD (IL)) 1 October 1998 (1998-10-01)	1-5,7-12
Y	page 7, line 6 - line 9 page 7, line 13 - line 15 page 11, line 1 - page 12, line 20	6
Y	BHASHYAM S ET AL: "Multiuser channel estimation for long code CDMA systems" IEEE, vol. 2, 23 September 2000 (2000-09-23), pages 664-669, XP010532328 cited in the application page 664, right-hand column, paragraph 2	6

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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Date of the actual completion of the international search	Date of mailing of the international search report
14 October 2004	15/11/2004

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No
PCT/CA2004/000757

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