

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
3 August 2006 (03.08.2006)

PCT

(10) International Publication Number  
WO 2006/081405 A3

- (51) International Patent Classification:  
H04B 7/02 (2006.01) H04L 1/02 (2006.01)
- (21) International Application Number:  
PCT/US2006/002900
- (22) International Filing Date: 27 January 2006 (27.01.2006)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:  
60/647,386 28 January 2005 (28.01.2005) 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, 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.

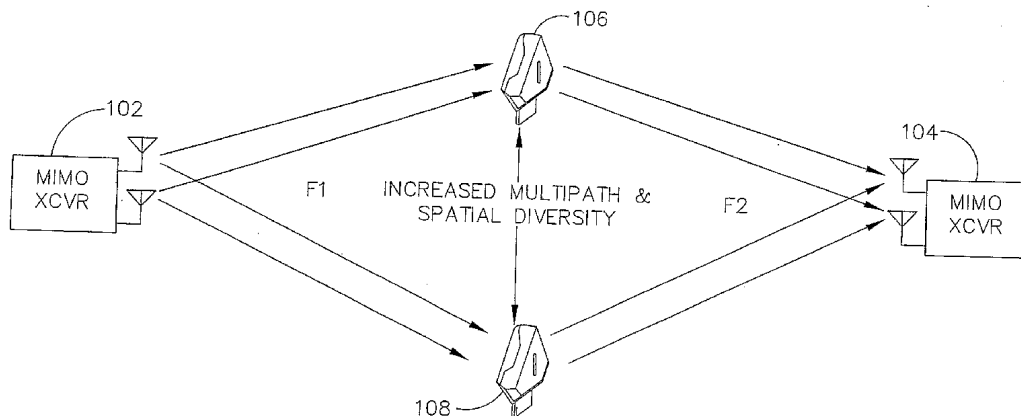
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(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, 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).

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Published:  
— with international search report  
(88) Date of publication of the international search report:  
16 April 2009

(54) Title: PHYSICAL LAYER REPEATER CONFIGURATION FOR INCREASING MIMO PERFORMANCE



(57) Abstract: A wireless network includes at least one Multiple Input Multiple Output (MIMO) wireless network station (102, 104) and two or more physical layer repeaters (106, 108). Each of the physical layer repeaters is for receiving a wireless signal (F1) to or from the at least one MIMO wireless network station and re-transmitting the wireless signal (F2) while continuing to receive the wireless signal. The repeaters may be either frequency translating repeaters or non-frequency translating repeaters.

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**INTERNATIONAL SEARCH REPORT**

International application No.  
PCT/US06/02900

**A. CLASSIFICATION OF SUBJECT MATTER**  
 IPC: **H04B 7/02**( 2006.01);**H04L 1/02**( 2006.01)  
  
 USPC: 375/267,299,347  
 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. : 375/267, 299, 347  
  
 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)  
 IEEEExplor

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X --- Y	US 1004/0229563 A1 (FITTON et al.) 18 November 2004 (18.11.2004), Fig. 1 and 4, paragraphs 14, 42-47 and 57	1, 4 and 7 ----- 2
Y	US 6,690,657 (LAU et al.) 10 February 2004 (10.02.2004), column 2	2
A	US 6,061,548 (REUDINK) 09 May 2000 (09.05.2000), whole document	1-22

Further documents are listed in the continuation of Box C.       See patent family annex.

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"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search 13 April 2008 (13.04.2008)	Date of mailing of the international search report <b>13 MAY 2008</b>
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