



(11) **EP 1 560 347 B8**

(12) **CORRECTED EUROPEAN PATENT SPECIFICATION**

Note: Bibliography reflects the latest situation

(15) Correction information: **Corrected version no 1 (W1 B1)**
Bibliography INID code(s) 73

(51) Int Cl.: **H04B 1/707** ^(2006.01) **H04B 7/06** ^(2006.01)
H04L 1/06 ^(2006.01)

(48) Corrigendum issued on:
19.09.2007 Bulletin 2007/38

(45) Date of publication and mention
of the grant of the patent:
25.04.2007 Bulletin 2007/17

(21) Application number: **05100393.7**

(22) Date of filing: **18.01.2002**

(54) **Simplified block linear equalizer with block space time transmit diversity**

Vereinfachter Block-Linearer Entzerrer mit Raum-Zeit Sende-Diversität

Egaliseur linéaire par blocs simplifié avec diversité d'émission par blocs spatio-temporels

(84) Designated Contracting States:
**AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU
MC NL PT SE TR**

(30) Priority: **25.01.2001 US 263915 P**
27.12.2001 US 34793

(43) Date of publication of application:
03.08.2005 Bulletin 2005/31

(62) Document number(s) of the earlier application(s) in
accordance with Art. 76 EPC:
02714751.1 / 1 354 424

(73) Proprietor: **INTERDIGITAL TECHNOLOGY
CORPORATION**
Wilmington, DE 19810 (US)

(72) Inventor: **Younglok, Kim**
Fort Lee
NJ 07024 (US)

(74) Representative: **Henningsson, Gunnar et al**
AWAPATENT AB,
Box 45086
104 30 Stockholm (SE)

(56) References cited:
EP-A- 1 069 707

- **KARIMI H R: "Efficient multi-rate multi-user detection for the asynchronous WCDMA uplink" VTC 1999-FALL. IEEE VTS 50TH. VEHICULAR TECHNOLOGY CONFERENCE. GATEWAY TO THE 21ST. CENTURY COMMUNICATIONS VILLAGE. AMSTERDAM, SEPT. 19 - 22, 1999, IEEE VEHICULAR TECHNOLOGY CONFERENCE, NEW YORK, NY: IEEE, US, vol. 1 CONF. 50, 19 September 1999 (1999-09-19), pages 593-597, XP002142538 ISBN: 0-7803-5436-2**
- **KARIMI H R ET AL: "A novel and efficient solution to block-based joint-detection using approximate Cholesky factorization" PERSONAL, INDOOR AND MOBILE RADIO COMMUNICATIONS, 1998. THE NINTH IEEE INTERNATIONAL SYMPOSIUM ON BOSTON, MA, USA 8-11 SEPT. 1998, NEW YORK, NY, USA, IEEE, US, 8 September 1998 (1998-09-08), pages 1340-1345, XP010314638 ISBN: 0-7803-4872-9**
- **KLEIN A ET AL: "ZERO FORCING AND MINIMUM MEAN-SQUARE-ERROR EQUALIZATION FOR MULTIUSER DETECTION IN CODE-DIVISION MULTIPLE-ACCESS CHANNELS" IEEE TRANSACTIONS ON VEHICULAR TECHNOLOGY, IEEE INC. NEW YORK, US, vol. 45, no. 2, 1 May 1996 (1996-05-01), pages 276-287, XP000598095 ISSN: 0018-9545**

Note: Within nine months from the publication of the mention of the grant of the European patent, any person may give notice to the European Patent Office of opposition to the European patent granted. Notice of opposition shall be filed in a written reasoned statement. It shall not be deemed to have been filed until the opposition fee has been paid. (Art. 99(1) European Patent Convention).

EP 1 560 347 B8

- **BENVENUTO N ET AL: "Joint detection with low computational complexity for hybrid TD-CDMA systems" VTC 1999-FALL. IEEE VTS 50TH. VEHICULAR TECHNOLOGY CONFERENCE. GATEWAY TO THE 21ST. CENTURY COMMUNICATIONS VILLAGE. AMSTERDAM, SEPT. 19 - 22, 1999, IEEE VEHICULAR TECHNOLOGY CONFERENCE, NEW YORK, NY: IEEE, US, vol. 1 CONF. 50, 19 September 1999 (1999-09-19), pages 618-622, XP002149179 ISBN: 0-7803-5436-2**