

(19) World Intellectual Property Organization
International Bureau(43) International Publication Date
20 February 2003 (20.02.2003)

PCT

(10) International Publication Number
WO 03/015322 A1(51) International Patent Classification⁷: **H04J 3/22**

(21) International Application Number: PCT/US02/24898

(22) International Filing Date: 5 August 2002 (05.08.2002)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

60/311,710	10 August 2001 (10.08.2001)	US
10/029,706	21 December 2001 (21.12.2001)	US
10/152,104	21 May 2002 (21.05.2002)	US

(71) Applicant: **INTERDIGITAL TECHNOLOGY CORPORATION** [US/US]; 300 Delawre Avenue, Suite 527, Wilmington, DE 19801 (US).

(72) Inventors: **ZEIRA, Eldad**; 239 West Neck Road, Huntington, NY 11743 (US). **TERRY, Stephen, E.**; 15 Summit Avenue, Northport, NY 11768 (US). **ZEIRA, Ariela**; 239 West Neck Road, Huntington, NY 11743 (US).

(74) Agents: **VOLPE, Anthony, S.** et al.; Volpe and Koenig, P.C., 400 One Penn Center, 1617 John F. Kennedy Boulevard, Philadelphia, PA 19103 (US).

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, 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, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW.

(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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

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: DYNAMIC LINK ADAPTION FOR TIME DIVISION DUPLEX (TDD)

TIMESLOT												
CODE	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12
0				A1		A6	A11					
1				A2		A7	A12					
2				A3		A8						
3				A4		A9						
4				A5		A10						
5												
6												
7												

(57) Abstract: A UE system implements dynamic link adaptation by adding or changing (Fig. 3E) control information to notify a receiver which timeslots and codes are currently active and which timeslots should be avoided. The UE provides synchronization such that the receiver knows which timeslots and codes the UE has used to map the coded composite transport channel onto physical channels. The UE attempts to avoid the timeslots which are experiencing transmission difficulties, while attempting to utilize the timeslots which are not experiencing transmission problems.



WO 03/015322 A1