

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
19 January 2006 (19.01.2006)

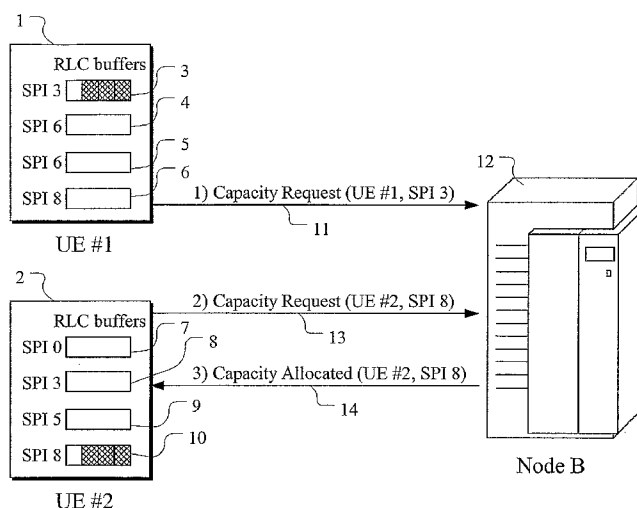
PCT

(10) International Publication Number
WO 2006/006000 A1

- (51) International Patent Classification: **H04L 12/56**, H04B 7/26
- (21) International Application Number: PCT/IB2005/001767
- (22) International Filing Date: 22 June 2005 (22.06.2005)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data: 60/585,250 2 July 2004 (02.07.2004) US
- (71) Applicant (for all designated States except US): **NOKIA CORPORATION** [FI/FI]; Keilalahdentie 4, FIN-02150 Espoo (FI).
- (71) Applicant (for LC only): **NOKIA INC.** [US/US]; 6000 Connection Drive, Irving, TX 75039 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **CHEMIAKINA, Svetlana** [DK/IT]; Arkilsdal 8, DK-9400 Norresundby (DK). **MOGENSEN, Preben** [DK/DK]; Elmelunden 13, DK-9260 Gistrup (DK).
- (74) Agents: **MAGUIRE, Francis, J.** et al.; Ware, Fressola, Van Der Sluys & Adolphson LLP, 755 Main Street, P.O. Box 224, Monroe, CT 06468 (US).
- (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, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, 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, 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

[Continued on next page]

(54) Title: QOS DIFFERENTIATION FOR WCDMA SERVICES MAPPED ONTO AN E-DCH CHANNEL



(57) Abstract: A SYSTEM HAS USER EQUIPMENT (1; 2) EACH HAVING BUFFERS (3, 4, 5, 6; 7, 8, 9, 10) FOR STORING PACKETS CLASSIFIED ACCORDING TO PRIORITY AND READY FOR TRANSMISSION OVER A RADIO INTERFACE TO A NETWORK ELEMENT (12). IN SUCH A SYSTEM, USER EQUIPMENT SENDS CAPACITY REQUEST SIGNALS (11; 13) INDICATIVE OF THE VARIOUS PRIORITIES OF THE BUFFERED PACKETS ON THE RADIO INTERFACE TO THE NETWORK ELEMENT. RATHER THAN SEEKING A CAPACITY ALLOCATION DECISION FROM A HIGHER LEVEL IN THE CORE NETWORK, THE NETWORK ELEMENT ITSELF MAKES THE CAPACITY ALLOCATION DECISION AND PROVIDES A CAPACITY ALLOCATION SIGNAL (14) TO THE USER EQUIPMENT. PACKETS THAT HAVE THUS BEEN ALLOCATED CAPACITY BY THE NETWORK ELEMENT ARE THEN SENT FROM THE USER EQUIPMENT TO THE NETWORK ELEMENT. HAVING THE NETWORK ELEMENT MAKE THE CAPACITY ALLOCATION DECISIONS ITSELF IS A MORE EFFICIENT SYSTEM SINCE THE NETWORK ELEMENT IS IN DIRECT COMMUNICATION WITH THE USER EQUIPMENT OVER THE RADIO INTERFACE AND THE DECISION IS MADE IN AN UNMEDIATED WAY.

WO 2006/006000 A1



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.