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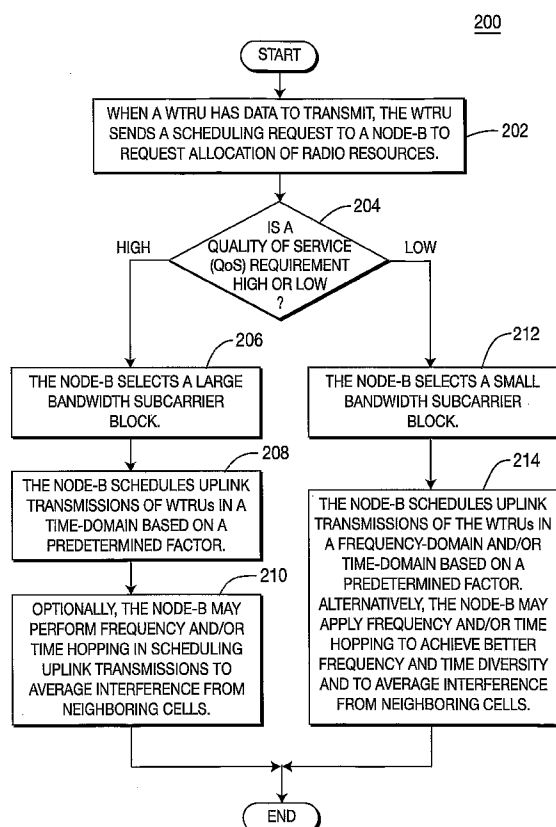
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[Continued on next page]

(54) Title: METHOD AND SYSTEM FOR SCHEDULING UPLINK TRANSMISSIONS IN A SINGLE CARRIER FREQUENCY DIVISION MULTIPLE ACCESS SYSTEM



(57) Abstract: A method and system for scheduling uplink transmissions in a single carrier frequency division multiple access (SC-FDMA) system are disclosed. A Node-B receives a scheduling request from a wireless transmit/receive unit (WTRU). The Node-B selects at least one subcarrier block having a certain bandwidth for the WTRU based on quality of service (QoS) requirement of the WTRU. If the QoS requirement is high, the Node-B selects at least one subcarrier block having a large bandwidth and if the QoS requirement is low, the Node-B selects at least one subcarrier block having a small bandwidth. The Node-B then schedules uplink transmissions in a time domain and/or a frequency domain based on a predetermined factor. The Node-B may perform frequency and/or time hopping in scheduling the uplink transmissions.



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,
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B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

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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)

MicroPatent

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 2005/0099975 A1 (CATREUX et al) 12 May 2005 (12.05.2005) entire document	1-4, 7-8, 11-18, 21-22, 25-32, 35-36, 39-42 ----- 5, 6, 9, 10, 19, 20, 23, 24, 33, 34, 37, 38
Y	WO 01/82544 A2 (MCFARLAND) 01 November 2001 (01.11.2001) entire document	5, 6, 9, 10, 19, 20, 23, 24, 33, 34, 37, 38
A	US 2004/0120274 A1 (PETRE et al) 24 June 2004 (24.06.2004) entire document	1-42
A	US 6,847,678 B2 (BEREZDIVIN et al) 25 January 2005 (25.01.2005) entire document	1-42

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