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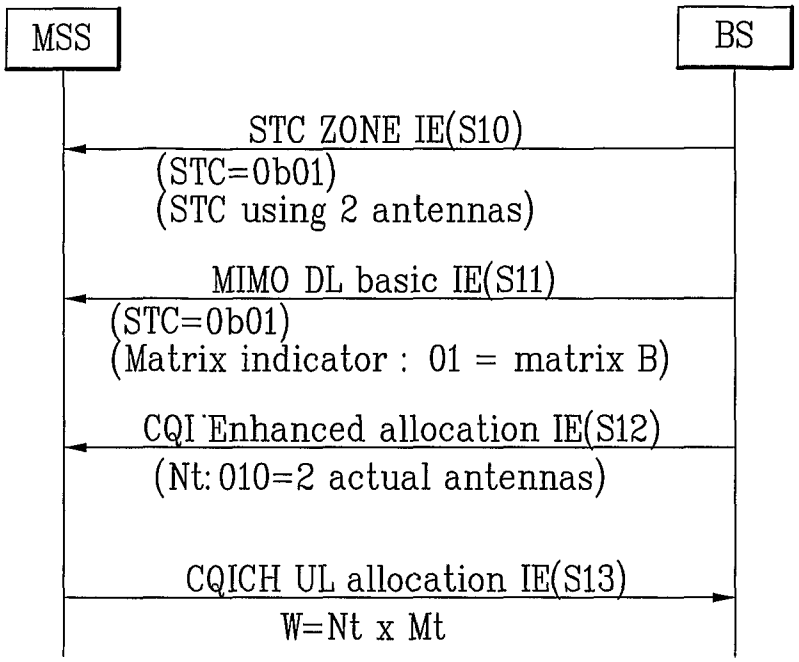
(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KZ, LC, LK, LR, 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.

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[Continued on next page]

(54) Title: A METHOD FOR ESTABLISHING FAST FEEDBACK CHANNEL AND TRANSMITTING INFORMATION IN A WIRELESS COMMUNICATION SYSTEM



(57) Abstract: A method of transmitting information in a wireless communication system is disclosed. More specifically, the method includes a base station (BS) which receives data from a mobile subscriber station (MSS) via an uplink channel. Using the received data, the BS determines quality of the uplink channel. Thereafter, the BS transmits feedback information to the MSS. Here, the feedback information is based on the determined quality of the uplink channel.

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/KR 2005/002703

A. CLASSIFICATION OF SUBJECT MATTER
IPC[8]: ***H04B 7/005*** (2006.01); ***H04B 7/26*** (2006.01)
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)
IPC[8]: H04B, H04Q

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)
WPI, PAJ, IEEE, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 1467503 A1 (MITSUBISHI DENKI KABUSHIKI KAISHA) 13 October 2004 (13.10.2004) & WO 03/061158 A1 (MITSUBISHI DENKI KABUSHIKI KAISHA) 24.07.2003 *Paragraphs [0013, 0014, 0054-0058]*	1, 2, 8, 9, 15, 16, 22, 23
A		4-7, 12-14, 19-21
	--	
A	EP 1317080 A1 (ALCATEL) 4 June 2003 (04.06.2003) *Paragraphs [0022-0026]*	1, 2, 8, 9, 15, 16, 22, 23
	--	
A	WO 2004/042970 A1 (SIEMENS AKTIENGESELLSCHAFT) 21 May 2004 (21.05.2004) *Page 10, line 6 - page 11, line 2; claim 1.*	1, 2, 8, 9, 15, 16, 22, 23
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☒ Further documents are listed in the continuation of Box C. ☒ See patent family annex.

* Special categories of cited documents:
"A" document defining the general state of the art which is not considered to be of particular relevance
"E" earlier application or patent but published on or after the international filing date
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
"O" document referring to an oral disclosure, use, exhibition or other means
"P" document published prior to the international filing date but later than the priority date claimed
"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
27 April 2007 (27.04.2007)	13 June 2007 (13.06.2007)

Name and mailing address of the ISA/ AT	Authorized officer
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Facsimile No. +43 / 1 / 534 24 / 535	Telephone No. +43 / 1 / 534 24 / 376

INTERNATIONAL SEARCH REPORT

International application No.
PCT/KR 2005/002703

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	ALMGREN, M. et al.: Radio Resource Allocation in AMPS/TACS Systems Based on Uplink Observations; IEEE 45th Vehicular Technology Conference, Volume 2, 25-28 July 1995; pages 599-603. *Chapter II.* ----	1, 2, 8, 9, 15, 16, 22, 23

Continuation of first sheet

1. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, the international search was carried out on the basis of:

Continuation No. III:

Observations where unity of invention is lacking

(Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

Subject 1 (claims 1 - 23) relates to an uplink quality determination and a corresponding feedback signal.
Subject 2 (claims 24 - 46) relates to a physical resource allocation for a downlink channel with a modulation pattern.

4. No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos. 1 - 23

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.
PCT/KR 2005/002703

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP A 1467503		US A1 2005079886	2005-04-14
		WO A1 03061158	2003-07-24
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		DE D1 60123983D	2006-11-30
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