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(71) Applicant *(for all designated States except US)*: **QUALCOMM INCORPORATED** [US/US]; 5775 Morehouse Drive, San Diego, CA 92121-1714 (US).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **DAS, Arnab** [IN/US]; 15 Walnut Street, Summit, NJ 07901 (US). **ALEJANDRO ANIGSTEIN, Pablo** [AR/US]; 50 Maple Avenue, Apt. 108, Springfield, NJ 07081 (US).

(74) Agent: **QUALCOMM INCORPORATED**; 5775 Morehouse Drive, San Diego, CA 92121-1714 (US).

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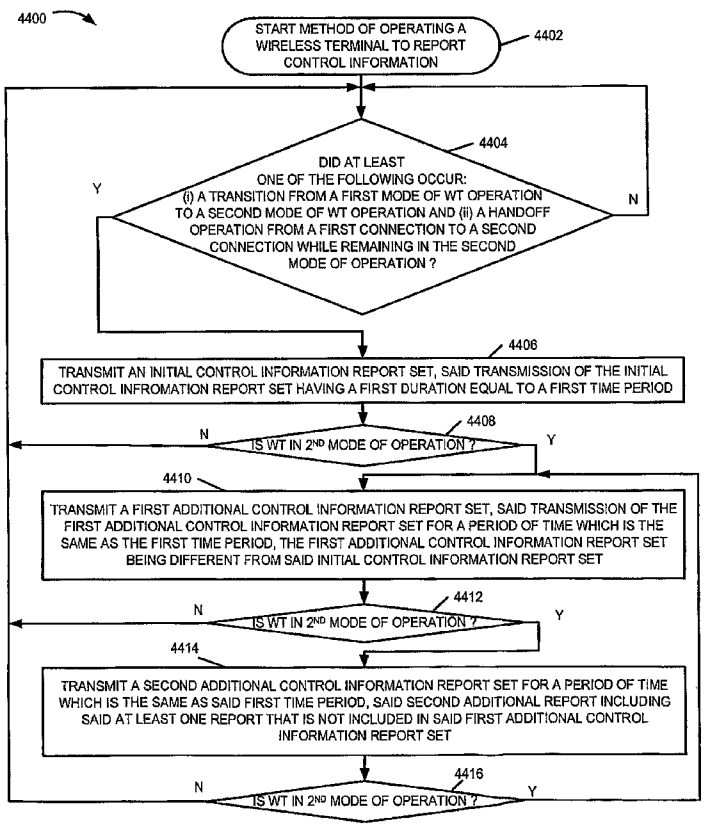
[Continued on next page]

(54) Title: METHODS AND APPARATUS FOR REPORTING COMMUNICATIONS DEVICE CONTROL INFORMATION



(57) Abstract: An initial reporting structure for an uplink dedicated control channel is used by a wireless terminal following a transition into a state of wireless terminal operation or action which makes it desirable to provide a base station with an initial set of control information which can be used to support uplink transmission of user data. Subsequently while continuing operation in a state supporting uplink transmission of user data, a recurring scheduled reporting structure for the uplink dedicated control channel is followed by the wireless terminal. The initial reporting structure provides for communication of at least some information reports, e.g., infrequently scheduled reports, which may not have been otherwise communicated during the same time interval if the recurring scheduled reporting structure had not been overridden. Thus the use of initial report sets facilitates a rapid overall understanding by the serving base station attachment point of the wireless terminal's status.

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INTERNATIONAL SEARCH REPORT

International application No
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A. CLASSIFICATION OF SUBJECT MATTER
INV. H04Q7/38

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)
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 practical, search terms used)
EPO-Internal, WPI Data, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	HOSEIN P ET AL.: "Optimal assignment of mobile station serving sector for the forward link of a time-shared wireless packet data channel" FIFTH IEE INTERNATIONAL CONFERENCE ON 3G MOBILE COMMUNICATION TECHNOLOGIES (3G 2004), 18 October 2004 (2004-10-18), - 20 October 2004 (2004-10-20) pages 654-658, XP002473771 London, UK	1-5,12, 13,17, 18,21, 25-27, 30,33, 37,39
Y	page 654, right-hand column, line 5 - line 10 page 655, left-hand column, line 22 - line 40	6-9,19, 20,31, 32,34-36

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[X] Further documents are listed in the continuation of Box C.

[X] 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 document 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
16 June 2008	24/06/2008

Name and mailing address of the ISA/	Authorized officer
European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Masche, Christian

INTERNATIONAL SEARCH REPORT

International application No
PCT/US2006/048582

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WO 2004/100450 A (KONINKL PHILIPS ELECTRONICS NV [NL]; SOOMRO AMJAD [US]) 18 November 2004 (2004-11-18) page 4, line 24 - page 5, line 25 figures 4,5 claim 5	6-9,31, 32,34-36
A	page 5, line 7 - line 18	22
X	WO 2005/065056 A (ELECTRONICS AND TELECOMM [KR]; SAMSUNG ELECTRONICS CO LTD [KR]; KT COR) 21 July 2005 (2005-07-21)	1-3, 10-16, 25-27, 30,37-40
Y		28
A	abstract page 1, line 10 - line 13 page 16, line 22 - page 17, line 22 page 32, line 1 - page 34, line 18 figures 3,11,12 page 18, line 21 - page 19, line 5 page 20, line 22 - page 21, line 7	29
Y	WO 2004/084503 A (NORTEL NETWORKS LTD [CA]) 30 September 2004 (2004-09-30) paragraphs [0028], [0039] - [0047]; figures 1,2	19,20
Y	US 2005/207335 A1 (SCHMIDL TIMOTHY M [US] ET AL) 22 September 2005 (2005-09-22) paragraphs [0026], [0029], [0032]; figure 4	28

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2006/048582

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. ☐ Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box 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:

see additional sheet

1. ☒ As all required additional search fees were timely paid by the applicant, this international search report covers allsearchable claims.

2. ☐ As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.

3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search reportcovers only those claims for which fees were paid, specifically claims Nos.:

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.:

Remark on Protest

☐ The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.

☐ The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.

☒ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-9, 12, 13, 17, 18, 21, 25-27, 30-37, 39

   Initial report set comprising more reports than additional reports

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2. claims: 10, 11, 14-16, 40

   The first mode is one of a sleep and a hold mode.

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3. claims: 19, 20

   A timing control circuit for correlating the uplink reporting structure with downlink signals

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4. claims: 22-24

   A report set size determination sub-module for determining an initial report set size as a function of the point in time with respect to the uplink transmission schedule at which said initial report set is to be transmitted

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5. claims: 28, 29, 38

   The dedicated uplink control channel is a single tone channel

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No
PCT/US2006/048582

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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WO 2004084503 A	30-09-2004	WO 2004084575 A2	30-09-2004
US 2005207335 A1	22-09-2005	NONE	