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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, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

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Declarations under Rule 4.17:

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

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

(88) Date of publication of the international search report:
22 February 2007

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: SLOW UPLINK POWER CONTROL

(57) Abstract: Embodiments of the invention provide embodiments of the invention provide and method, network entity and user equipment for slow uplink power control of user equipment in a wireless communication system by responding to a long term control metric that is derived from an uplink channel metric over a plurality of transmission instances and a set of performance criteria. A method for slow uplink power control in accordance with and embodiment of the invention measures at least one uplink channel metric for user equipment (310) and then determines an appropriate transmit power for the user equipment by using a control metric derived from the uplink channel metric corresponding to a plurality of transmission instances (330) for the user equipment (340).



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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 06/23900

A. CLASSIFICATION OF SUBJECT MATTER IPC(8): H04B 7/00 USPC: 455/522 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) USPC: 375/130;370/319,344 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) Electronic data base: USPTO WEST (USPT, PGPB, EPAB, JPAB) Search terms used: power control, uplink, transmission power, parameter or metric, user equipment																					
C. DOCUMENTS CONSIDERED TO BE RELEVANT																					
<table border="1"> <thead> <tr> <th>Category*</th> <th>Citation of document, with indication, where appropriate, of the relevant passages</th> <th>Relevant to claim No.</th> </tr> </thead> <tbody> <tr> <td>X</td> <td rowspan="2">US 6,845,122 B2 (ZEIRA) 18 January 2005 (18.01.2005), entire document</td> <td>1-5, 9, 10</td> </tr> <tr> <td>---</td> <td></td> </tr> <tr> <td>Y</td> <td></td> <td>6-8</td> </tr> <tr> <td>Y</td> <td>US 2002/0145988 A1 (DAHLMAN) 10 October 2002 (10.10.2002), entire document</td> <td>6-8</td> </tr> <tr> <td>A</td> <td>US 6,606,343 B2 (ZEIRA) 12 August 2003 (12.08.2003), entire document</td> <td>1-10</td> </tr> <tr> <td>A</td> <td>US 6,600,773 B2 (ZEIRA) 29 July 2003 (29.07.2003), entire document</td> <td>1-10</td> </tr> </tbody> </table>	Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.	X	US 6,845,122 B2 (ZEIRA) 18 January 2005 (18.01.2005), entire document	1-5, 9, 10	---		Y		6-8	Y	US 2002/0145988 A1 (DAHLMAN) 10 October 2002 (10.10.2002), entire document	6-8	A	US 6,606,343 B2 (ZEIRA) 12 August 2003 (12.08.2003), entire document	1-10	A	US 6,600,773 B2 (ZEIRA) 29 July 2003 (29.07.2003), entire document	1-10	
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"P" document published prior to the international filing date but later than the priority date claimed																					
Date of the actual completion of the international search 6 November 2006 (06.11.2006)	Date of mailing of the international search report 15 DEC 2006																				
Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US, Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201	Authorized officer: Lee W. Young PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774																				

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US 06/23900

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.: 11
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:

- 1. As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
- 2. As all searchable claims could be searched without effort justifying 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 report covers 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.