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- (71) Applicant (for all designated States except US): **QUALCOMM INCORPORATED** [US/US]; Attn: International IP Administration, 5775 Morehouse Drive, San Diego, California 92121 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **MONTOJO, Juan** [ES/US]; 5775 Morehouse Drive, San Diego, CA 92121 (US). **MALLADI, Durga Prasad** [US/US]; 5775 Morehouse Drive, San Diego, CA 92121 (US).
- (74) Agent: **PATEL, Milan, I.**; Attn: International IP Administration, 5775 Morehouse Drive, San Diego, California 92121 (US).
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(54) Title: ARRANGEMENT AND METHOD FOR TRANSMITTING CONTROL INFORMATION IN WIRELESS COMMUNICATION SYSTEMS

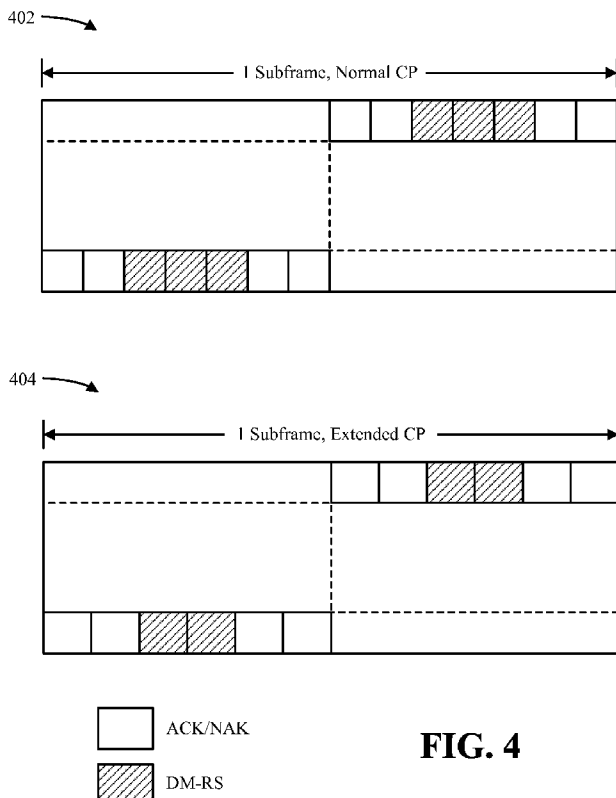


FIG. 4

(57) Abstract: Systems and methodologies are described that facilitate arrangement and transmission of control information in a wireless communication system. As described herein, a scheduled transmission of acknowledgement (ACK) signaling and channel quality information (CQI) signaling in a common subframe can be adapted for network implementations with limited link budget wherein ACK signaling is configured for repetition over multiple subframes to ensure a desired error rate level for the ACK signaling. To these ends, various aspects described herein facilitate modification of a coding rate applied to ACK signaling to be transmitted with data based on a repetition factor of the ACK signaling. Additionally and/or alternatively, various aspects described herein facilitate dropping of CQI signaling and transmission of only ACK signaling on subframes where CQI and ACK signaling are to be transmitted substantially simultaneously and ACK transmission is configured for repetition over multiple subframes.

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C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	<p>ERICSSON: "Uplink Control Signaling - Summary of e-mail discussions" 3RD GENERATION PARTNERSHIP PROJECT (3GPP), [Online] 12 January 2007 (2007-01-12), XPO50104503 MOBILE COMPETENCE CENTRE ; 650, ROUTE DES LUCIOLES ; F-06921 SOPHIA-ANTIPOLIS CEDEX ; FRANCE Retrieved from the Internet: URL:http:\\www.3gpp.org\\ftp\\tsg_ran\\WG1_RL1\\TSGR1_47bis\\Docs\\R1-070472.zip> " page 1, antepenultimate und penultimate paragraph "</p> <p style="text-align: center;">----- -/--</p>	1-26

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

Authorized officer

Agudo Cortada, E

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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	<p>SAMSUNG: "Simultaneous UE transmission of ACK/NAK and CQI" 3RD GENERATION PARTNERSHIP PROJECT (3GPP), [Online] no. Shanghai, China; 20071008, 2 October 2007 (2007-10-02), XP050107630 MOBILE COMPETENCE CENTRE ; 650, ROUTE DES LUCIOLES ; F-06921 SOPHIA-ANTIPOLIS CEDEX ; FRANCE Retrieved from the Internet: URL:http:\\www.3gpp.org\\ftp\\tsg_ran\\tsg_ra n\\WG1_RL1\\TSGR1_50b\\Docs\\R1-074093.zip> * section 2.2 *</p>	1-26
A	<p>SAMSUNG: "On handling simultaneous UE transmission of ACK/NAK and CQI" 3RD GENERATION PARTNERSHIP PROJECT (3GPP), [Online] 20 June 2007 (2007-06-20), XP050106773 MOBILE COMPETENCE CENTRE ; 650, ROUTE DES LUCIOLES ; F-06921 SOPHIA-ANTIPOLIS CEDEX ; FRANCE Retrieved from the Internet: URL:http:\\www.3gpp.org\\ftp\\tsg_ran\\tsg_ra n\\WG1_RL1\\TSGR1_49b\\Docs\\R1-073125.zip> * section 2.2 *</p>	1-26