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(72) Inventors; and

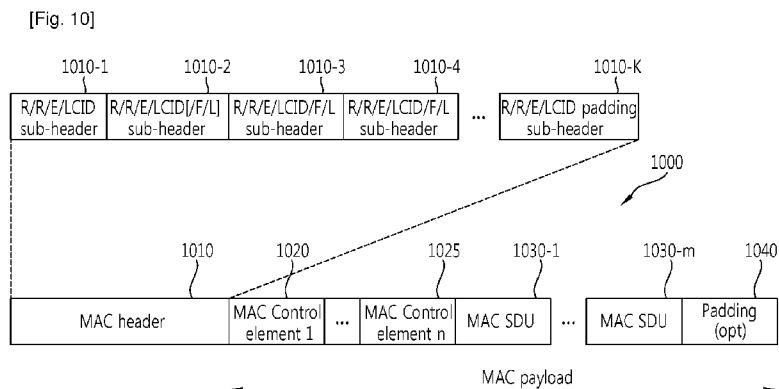
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(54) Title: APPARATUS AND METHOD FOR TRANSMITTING POWER INFORMATION IN MULTIPLE COMPONENT CARRIER SYSTEM



(57) Abstract: Disclosed are an apparatus and a method for transmitting power information by a mobile station in a multiple component carrier system. The exemplary embodiment of the present invention includes: obtaining power headroom that is a difference between maximum transmit power of a mobile station for each component carrier and power estimated for actual uplink transmission; configuring an identification field that identifies a component carrier that the power headroom is for; configuring power headroom fields that indicate a level of power headroom; and generating a medium access control protocol data unit (MAC PDU) including the identification field and the power headroom field and transmitting the generated MAC PDU to a base station.

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A. CLASSIFICATION OF SUBJECT MATTER**H04W 24/10(2009.01)i, H04B 7/26(2006.01)i, H04J 11/00(2006.01)i, H04W 80/02(2009.01)i**

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)

H04W 24/10; H04J 3/22; H04L 12/43; H04J 3/24

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKOMPASS(KIPO internal) & Keywords: power, headroom, carrier

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	3GPP TSG-RAN WG1 #60bis, "Power headroom reporting for carrier aggregation", 12 April 2010 See sections 2. Discussion and 2.2 The power headroom reporting for different scenarios.	1-20
A	3GPP TSG RAN WG2 #60bis, "UE transmission power headroom report for LTE", 14 January 2008 See sections 1. Introduction and 2. Discussion.	1-20
A	US 2005-0013271 A1 (CHRISTOPHER G. LOTT et al.) 20 January 2005 See abstract; paragraphs [0011]-[0013],[0121]-[0129] ; claims 1-3,7 and figures 18-22.	1-20

 Further documents are listed in the continuation of Box C. See patent family annex.

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