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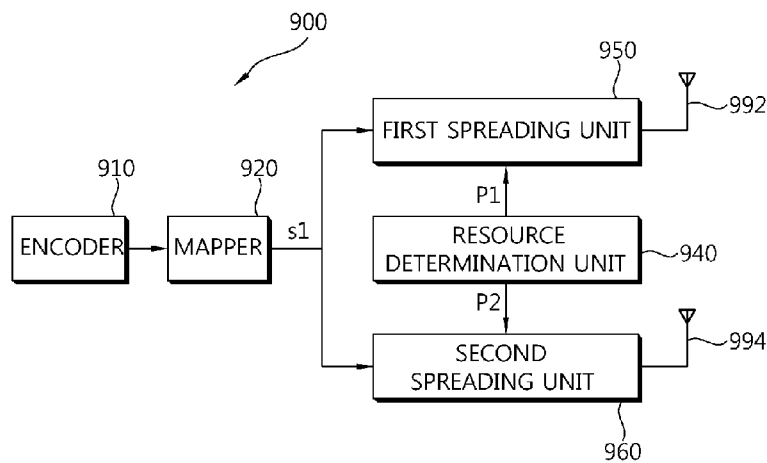
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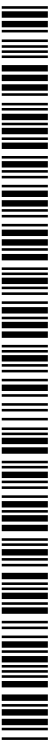
[Continued on next page]

(54) Title: METHOD AND APPARATUS FOR TRANSMITTING HARQ ACK/NACK SIGNAL IN MULTI-ANTENNA SYSTEM

[Fig. 23]



(57) Abstract: A method and apparatus of transmitting an ACK/NACK signal for a hybrid automatic repeat request (HARQ) in a wireless communication system is provided. A first ACK/NACK resource index and a second ACK/NACK resource index based on resources used to transmit a downlink control channel is determined. An ACK/NACK signal for a downlink transport block is transmitted through a plurality of antennas using first ACK/NACK resources obtained from the first ACK/NACK resource index and second ACK/NACK resources obtained from the second ACK/NACK resource index. An HARQ ACK/NACK signal can be reliably transmitted through a plurality of antennas.



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B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

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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

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

eKOMPASS(KIPO internal) & Keywords: HARQ, ACK, NACK, multiple antenna

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	KR 10-2008-0088127 A (SAMSUNG ELECTRONICS CO., LTD.) 02 October 2008 See abstract and claim 1-10.	1-11
A	KR 10-2008-0065890 A (SAMSUNG ELECTRONICS CO., LTD.) 15 July 2008 See abstract and claim 1-12.	1-11
A	US 2009-0055703 A1 (KIM YOUNG-BUM et al.) 26 February 2009 See abstract and claim 1-23.	1-11
A	US 2008-0212506 A1 (LEE JU-HO et al.) 04 September 2008 See abstract and claim 1-22.	1-11

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

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"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

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