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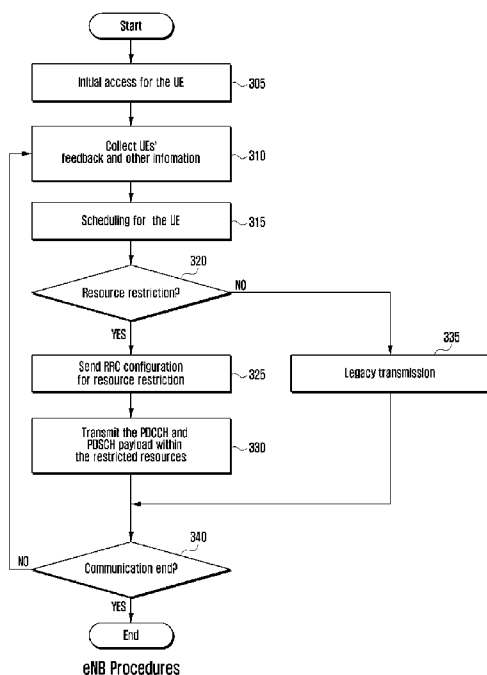
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[Continued on next page]

- (54) **Title:** APPARATUS AND METHOD OF RESOURCE ALLOCATION FOR DATA AND CONTROL CHANNELS IN A WIRELESS COMMUNICATION SYSTEM

[Fig. 3a]



(57) **Abstract:** A method and system for resource allocation for data and control channels is provided. A downlink transmission method of a base station in a the system includes determining, by the base station, whether re-sources for a terminal are restricted; determining a sub-set of resource blocks for the terminal from among all resource blocks, if the resources for the terminal are restricted; transmitting information about the sub-set of the resource blocks to the terminal; and allocating a first sub-sub-set of the sub-set of the resource blocks for control channel transmission, and a second sub-sub-set of the sub-set of the resource blocks for data channel transmission.



TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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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)

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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

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: resource allocation, resource block, restrict, subset, control channel, data channel

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2010-0142461 A1 (MIKI, NOBUHIKO et al.) 10 June 2010 See abstract; paragraphs [0003],[0008],[0051],[0114]-[0117],[0132]-[0140]; claims 1,15,23-25 and figures 1,2,7A,9A.	5-8,12-15
A	KR 10-1026349 B1 (NTT DOCOMO, INC.) 04 April 2011 See abstract; paragraphs [0003],[0055],[0056]; claims 1,4,5 and figures 1,8,9.	1-15
A	WO 2011-005787 A1 (QUALCOMM INCORPORATED) 13 January 2011 See abstract; paragraphs [0006]-[0013],[0055],[0062],[0066]; claims 1,9 and figures 4,10,11.	1-15



Further documents are listed in the continuation of Box C.



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"&" document member of the same patent family

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INTERNATIONAL SEARCH REPORT

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