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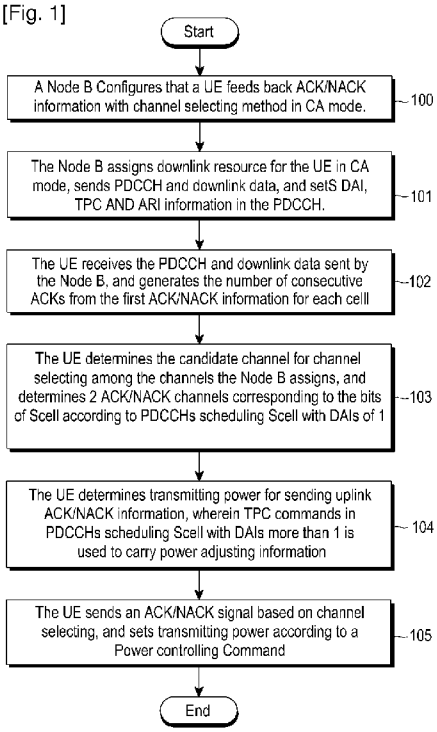
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[Continued on next page]

(54) **Title**: METHOD AND APPARATUS FOR ASSIGNING RESPONSE CHANNEL RESOURCES

[Fig. 1]



(57) **Abstract**: An apparatus and method for assigning an acknowledgement (ACK) / a negative acknowledgement (NACK) channel resources. The method includes setting a User Equipment (UE) to feed back Acknowledgement (ACK)/Negative Acknowledgement (NACK) information in a Carrier Aggregation (CA) mode; setting a Transmit Power Control (TPC) field of a Physical Downlink Controlling Channel (PDCCH) message to transmit an ACK/NACK Resource Indicator (ARI) information, when a Downlink Assigning Indicator (DAI) value of the PDCCH message of a Secondary cell (Scell) scheduled in a non cross-carrier manner is 1; setting the TPC field to transmit a TPC command for the ACK/NACK feedback information, when the DAI value is greater than 1; and transmitting the PDCCH message and downlink data to the UE.

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LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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A. CLASSIFICATION OF SUBJECT MATTER

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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)

H04B 7/26; H04W 72/12; H04J 11/00; H04L 1/18; H04W 52/18; H04L 27/26

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: PDCCH, Transmit Power Control, Downlink Assigning Indicator

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 2010-044564 A2 (LG ELECTRONICS INC. et al.) 22 April 2010 See abstract, paragraphs [51]-[53], [86], [89] and claims 1-4.	1-10
A	KR 10-2009-0097805 A (LG ELECTRONICS INC.) 16 September 2009 See abstract, paragraphs [29]-[31], claims 1-3 and figure 4.	1-10
A	KR 10-2010-0039203 A (LG ELECTRONICS INC.) 15 April 2010 See abstract; paragraphs [50]-[52]; claims 1, 12, 13 and figure 7.	1-10
A	KR 10-2009-0075442 A (LG ELECTRONICS INC.) 08 July 2009 See paragraphs [21]-[28], claims 1-3 and figures 4, 5.	1-10

☐ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

* Special categories of cited documents:

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Date of the actual completion of the international search	Date of mailing of the international search report
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Name and mailing address of the ISA/KR	Authorized officer
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Information on patent family members

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		US 2011-0194500 A1	11.08.2011
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		WO 2009-088172 A3	16.07.2009