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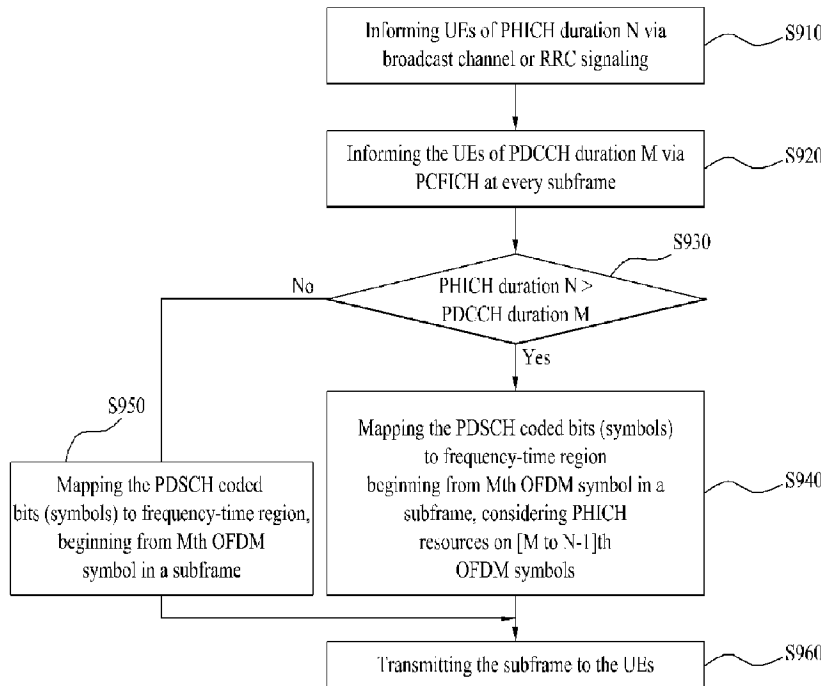
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[Continued on next page]

(54) Title: FLEXIBLE ALLOCATION OF CONTROL SIGNAL RESOURCES

[Fig. 9]



(57) Abstract: A wireless communication system is disclosed. The method for processing a downlink subframe at a user equipment in a wireless communication system includes receiving information associated with a PHICH duration, receiving a subframe that includes a PHICH, a PDCCH, and a PDSCH, and obtaining the PDSCH after a lapse of the PDCCH duration. If the PHICH duration is larger than the PDCCH duration, the obtaining of the PDSCH is performed in consideration of PHICH resources in a duration that corresponds to the PHICH duration but not to the PDCCH duration.

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INTERNATIONAL SEARCH REPORT

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PCT/KR2010/004237**A. CLASSIFICATION OF SUBJECT MATTER****H04B 7/26(2006.01)i, H04L 1/18(2006.01)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)

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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: PDCCH, PDSCH, PHICH, ARQ, subframe and similar terms

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	KR 10-2010-0020422 A(LG ELECTRONICS CO., LTD) 22 February 2010 See abstract, paragraphs [0083-0108], and Figs. 13-18	1-8
A	SAMSUNG, "PDCCH Extension to Support Operation with Cross-Carrier Scheduling", 3GPP TSG RAN WG1 #60, R1-101142, San Francisco, USA, February 22-26, 2010, See the pages 1-2.	1-8
A	KYOCERA, "Interference Management for Control Channels in Outdoor Hotzone Scenario", 3GPP TSG RAN WG1 Meeting #61, R1-102678, Montreal, Canada, 10-14 May 2010, See the pages 2-5.	1-8
A	NEC, "Mapping of DL physical channels to physical resources for TS 36.50", 3GPP TSG-RAN WG5 #40, R5-083800, Jeju Island, Korea, 18 ~ 22 June 2008, See the table 1.	1-8

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

* Special categories of cited documents:

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"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

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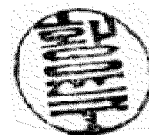
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INTERNATIONAL SEARCH REPORT

Information on patent family members

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
KR 10-2010-0020422 A	22.02.2010	EP 2266223 A2 WO 2010-018993 A2 WO 2010-018993 A3	29.12.2010 18.02.2010 18.02.2010