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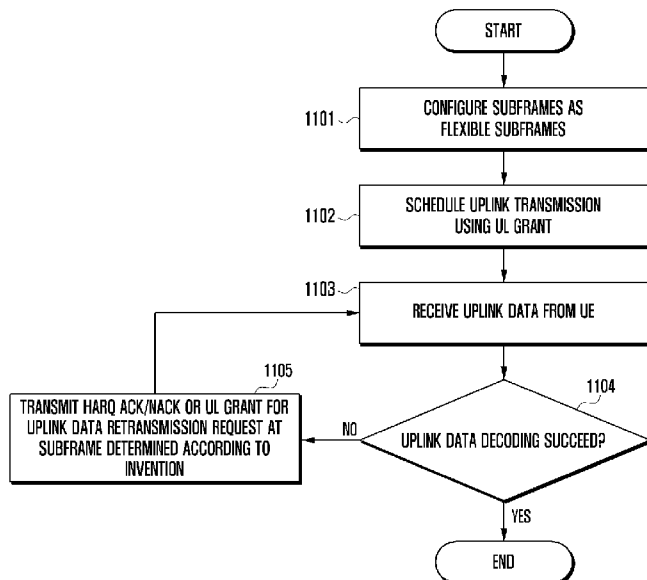
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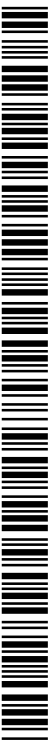
[Continued on next page]

(54) Title: MOBILE COMMUNICATION SYSTEM AND DATA TRANSMISSION METHOD THEREOF

[Fig. 11]



(57) Abstract: A data transmission method and apparatus is provided for transmitting UL grant or ACK/NACK at flexible subframes in a Time Division Duplex (TDD) system. The data transmission method of a base station according to the present invention includes configuring subframes irrelevant to Hybrid Automatic Repeat reQuest (HARQ) process as flexible subframes; scheduling uplink transmission at the flexible subframes with uplink grant; receiving uplink data transmitted by a terminal at the flexible subframes as scheduled; and transmitting, when decoding the uplink data fails, HARQ acknowledgement/negative acknowledgement (ACK/NACK) or uplink grant to request retransmission of the uplink data. The data transmission method of the present invention is capable of utilizing flexible subframes for uplink transmission without influencing the uplink HARQ process associated with the downlink subframes configured as flexible subframes.



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**A. CLASSIFICATION OF SUBJECT MATTER****H04L 1/18(2006.01)i, H04L 27/26(2006.01)i**

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**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

H04L 1/18; H04W 72/12; H04W 4/00; H04L 5/14

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) &amp; Keywords:HARQ, flexible subframe, scheduling, UL grant, retransmission

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 2010-049587 A1 (NOKIA CORPORATION et al.) 06 May 2010 See abstract, page17,line13-page 20,line15 and claims 1-8.	6, 13
A	US 2009-0274078 A1 (ZHAO MENG et al.) 05 November 2009 See abstract, figs. 5-6 and claims 1-9.	1-15
A	US 2010-0322165 A1 (YOO HEE CHUL) 23 December 2010 See abstract, figs. 4-6 and claims 1-7.	1-15

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

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"&amp;" document member of the same patent family

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