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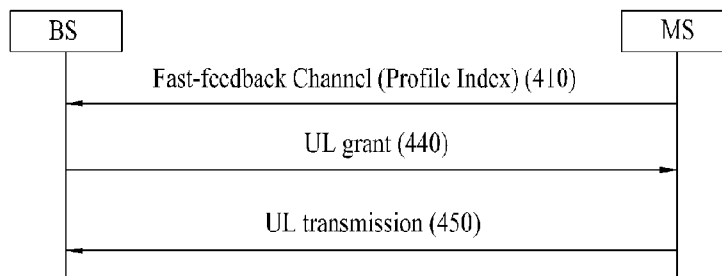
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(54) **Title:** METHOD OF TRANSMITTING AND RECEIVING UPLINK DATA USING TRANSMISSION OF PROFILE INDEXES

[Fig. 4]



(57) **Abstract:** A method of transmitting and receiving uplink data using transmission of profile indexes is disclosed. The method includes transmitting, at a mobile station, any one of codewords mapped to a plurality of bandwidth request profiles according to a service characteristic to a base station through a fast feedback channel, and upon receiving an uplink grant message for an uplink resource allocated in correspondence to the codeword from the base station, transmitting data through the uplink resource. As a result, collision does not occur during a resource request, quality of service (QoS) of a real-time traffic sensitive to delay can be satisfied, an uplink allocation request procedure is simplified thus reducing message overhead, and a resource can be efficiently used according to a characteristic of a service provided to the mobile station.

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**A. CLASSIFICATION OF SUBJECT MATTER****H04W 72/04(2009.01)i, H04W 28/24(2009.01)i, H04W 68/02(2009.01)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)

IPC H04B, H04J, H04L, H04W

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 since 1975

Japanese Utility models and applications for Utility models since 1975

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

eKOMPASS(KIPO internal), google scholar &amp; keywords: bandwidth request, fast feedback channel

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	HOWON LEE, DONG-HO CHO, Fast Dedicated Retransmission Scheme for Reliable Multicast Services in OFDMA Systems, In: Vehicular Technology Conference, 2005. VTC-2005-Fall. 2005	1-4, 9-11
Y	IEEE 62nd, Sep. 2005., Vol.2, pp.1108-1112, ISBN: 0-7803-9152-7	5
A	See Sec.II. RELATED WORKS AND PROBLEM STATEMENT	6-8,12,13
Y	KR 10-2006-0100202 A(LG ELECTRONICS INC.) 20 SEPTEMBER 2006 See abstract; page 3, line 21-page 3, line 31; fig.5; claims 1, 15.	5
A	KR 10-2006-0049749 A(SAMSUNG ELECTRONICS CO., LTD.) 19 MAY 2006 See abstract; fig.2; claim 1.	1-13
A	US 2005/0265227 A1(MYUNG-JWANG BYUN et al.) 1 DECEMBER 2005 See abstract; paragraphs 44-47; fig.3; claim 1.	1-13

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

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