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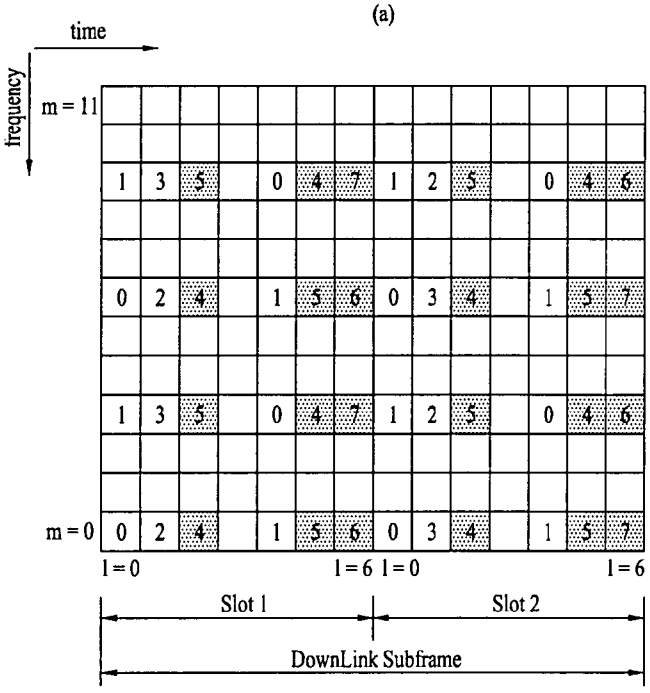
[Continued on next page]

(54) Title: REFERENCE SIGNAL TRANSMISSION METHOD FOR DOWNLINK MULTIPLE INPUT MULTIPLE OUTPUT SYSTEM

FIG. 8



(57) Abstract: A method of a reference signal (RS) in a downlink MIMO communication system is disclosed. The method comprises generating a subframe including the RS, and transmitting the generated subframe to an user equipment (UE). RSs of predetermined four antennas among the eight transmitting antennas are mapped into a first OFDM symbol and a second OFDM symbol of the subframe, and RSs of one or more antennas among the eight transmitting antennas are mapped into the other OFDM symbols. The other OFDM symbols are recognized by only a UE that supports the eight transmitting antennas.

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B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

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Korean utility models and applications for utility models
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eKOMPASS(KIPO internal) & Keywords: MIMO, reference, signal, RS,OFDM, symbol, subframe, map, antenna

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X A	US 2007-0248113 A1 (HYUN SOO KO et al.) 25 October 2007 See abstract and claims 1,5,14,17-20	1,10,17 2-9,11-16,18-20
A	KR 10-2008-0033060 A (LG ELECTRONICS INC.) 16 April 2008 See abstract and claims 1-3	1-20
A	KR 10-2007-0101808 A (LG ELECTRONICS INC.) 17 October 2007 See abstract and claim 1	1-20
A	KR 10-2008-0101269 A (POSDATA INC.) 21 November 2008 See abstract	1-20

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

☒ See patent family annex.

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"A" document defining the general state of the art which is not considered to be of particular relevance
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"&" document member of the same patent family

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