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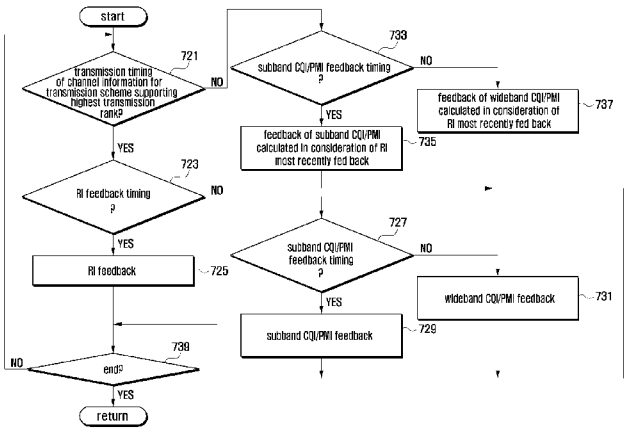
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[Continued on next page]

(54) Title: APPARATUS AND METHOD FOR SENDING AND RECEIVING CHANNEL STATE INFORMATION IN COMMUNICATION SYSTEM

[Fig. 13]



(57) Abstract: The present invention relates to a channel status information transmission/reception method and apparatus in a wireless communication system in which the transmission apparatus generates channel status informations for at least two transmission schemes by combining rank informations corresponding to the transmission schemes into combined rank information through analyzing an uplink channel, and transmits the channel status informations for the respective transmission schemes on uplink channel, the channel status information for one of the transmission schemes containing the combined rank information; the reception apparatus receives the channel status informations corresponding to at least two transmission schemes, the channel status information for one of the transmission schemes including combined rank information for the transmission schemes, schedules downlink channel according to the channel status information, and transmits signals on the downlink channel. According to the present invention, the transmission apparatus combines rank informations of a plurality of transmission schemes and feeds back the combined rank information so as to reduce overhead at a reception apparatus.

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A. CLASSIFICATION OF SUBJECT MATTER

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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
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: channel status, rank, CQI, PMI

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 2008-097041 A2 (LG ELECTRONICS INC.) 14 August 2008 See abstract; paragraphs [0008],[0015],[0018],[0034],[0044]-[0046]; claims 1-3,11-13 and figures 2-4.	1-15
A	EP 2164201 A2 (TELEFONAKTIEBOLAGET L M ERICSSON (PUBL)) 17 March 2010 See abstract; paragraphs [0002],[0011]; claims 1-4 and figures 1,7,8.	1-15
A	3GPP "Remaining Issues on UE feedback." TSG RAN WG1 Meeting #53 R1-081821, May 2008, pp. 1-4.	1-15

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

☒ See patent family annex.

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Information on patent family members

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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		EP 2127222 A4	21.04.2010
		EP 2127222 B1	13.04.2011
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		US 2010-0097949 A1	22.04.2010
		WO 2008-097041 A3	14.08.2008
EP 2164201 A2	17.03.2010	None	