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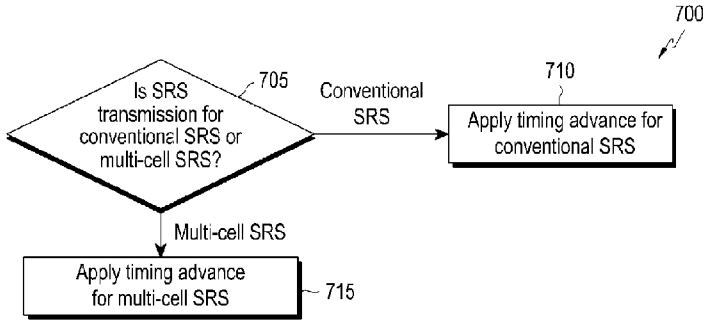
(54) Title: METHOD AND APPARATUS FOR A MULTI-CELL FULL-DIMENSION MIMO SYSTEM



(57) Abstract: The present disclosure relates to a pre-5th-Generation (5G) or 5G communication system to be provided for supporting higher data rates Beyond 4th-Generation (4G) communication system such as Long Term Evolution (LTE). A method for interference reduction of a user equipment (UE) in a wireless communication system. The method comprises receiving, from a base station (BS), configuration information comprising a set of different transmission parameters for cells of a multi-cell full dimension multi-input multi-output (MC FD-MIMO) system, determining a type of sounding reference signal (SRS) based on the configuration information, and transmitting, to the BS, an SRS based on the configuration information over at least one of a predetermined or a configured multi-cell SRS (MC SRS) resources configured by the BS, wherein the SRS includes a set of SRS sequences.

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

H04B 7/0413(2017.01)i, H04B 7/0456(2017.01)i, H04B 7/06(2006.01)i, H04J 11/00(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)
H04B 7/0413; H04B 15/00; H04W 72/04; H04W 72/10; H04B 7/0456; H04B 7/06; H04J 11/00

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: multi-cell full dimension multiple-input multiple-output (MC FD-MIMO), multi-cell SRS (MC SRS), configuration information, SRS type, MC SRS resource

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	ALCATEL-LUCENT et al., `Summary of SRS Enhancements`, R1-101864, 3GPP TSG-RAN WG1 #60bis, Beijing, China, 06 April 2010 See sections 1-2.	1-15
A	POTEVIO, `Considerations on mitigating multi-cell SRS interference and increasing SRS capacity`, R1-100611, 3GPP TSG-RAN WG1 Meeting #59bis, Valencia, Spain, 12 January 2010 See sections 1-3.	1-15
A	CATT et al., `Considerations on increasing SRS multiplexing`, R1-102057, 3GPP TSG RAN WG1 Meeting #60bis, Beijing, China, 06 April 2010 See section 2; and figure 1.	1-15
A	US 2011-0312355 A1 (FANG-CHEN CHENG et al.) 22 December 2011 See paragraphs [0029]-[0037]; and figures 4-6.	1-15
A	US 2013-0242895 A1 (QUALCOMM INC.) 19 September 2013 See paragraphs [0066]-[0083]; claim 1; and figures 7A-8.	1-15

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

☒ See patent family annex.

* Special categories of cited documents:
"A" document defining the general state of the art which is not considered to be of particular relevance
"E" earlier application or patent but published on or after the international filing date
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"O" document referring to an oral disclosure, use, exhibition or other means
"P" document published prior to the international filing date but later than the priority date claimed
"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
"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents,such combination being obvious to a person skilled in the art
"&" document member of the same patent family

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INTERNATIONAL SEARCH REPORT

Information on patent family members

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