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(54) Title: PRECODING CONTROL CHANNELS IN WIRELESS NETWORKS

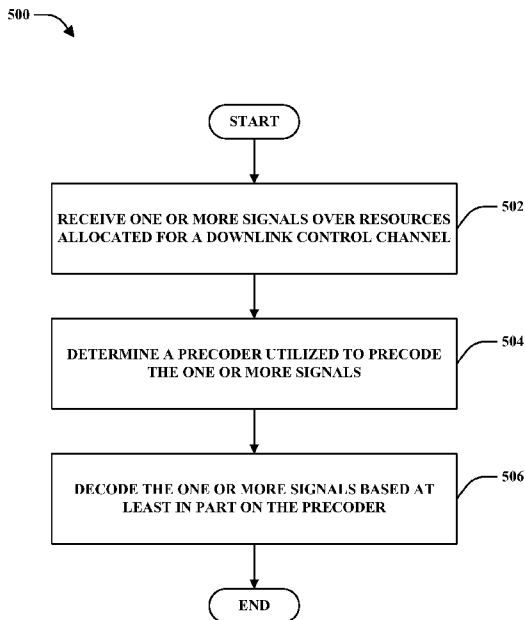


FIG. 5

(57) Abstract: Systems and methodologies are described that facilitate precoding signals transmitted over downlink control channels to provide transmit diversity. A dedicated reference signal (DRS) related to a wireless device can additionally be precoded such that the wireless device can determine a precoder or related parameters based at least in part on performing a channel estimate for the precoded DRS signal. The wireless device can utilize the determined precoder or related parameters to decode precoded signals received over downlink control channel resources. Additionally or alternatively, an access point can signal a sequence of precoders to the wireless device. The access point can cycle through the sequence of precoders to precode signals for transmission over downlink control channel resources, and the wireless device can decode the signals based at least in part on similarly cycling through the precoders for received signals.

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Electronic data base consulted during the international search (name of data base and, where practical, search terms used)
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C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 2008/115588 A2 (INTERDIGITAL TECH CORP [US]; PAN KYLE JUNG-LIN [US]; GRIECO DONALD M []) 25 September 2008 (2008-09-25)	1-4, 8-11, 14-16, 18-20
Y	paragraph [0051]; figure 12	5-7, 12, 13, 17, 21, 22
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Further documents are listed in the continuation of Box C. See patent family annex.

* Special categories of cited documents :

<p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier document but published on or after the international filing date</p> <p>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p>	<p>"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</p> <p>"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</p> <p>"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.</p> <p>"&" document member of the same patent family</p>
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Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016	Authorized officer Barrientos Lezcano
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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
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