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(54) Title (EN): PRECODING CONTROL CHANNELS IN WIRELESS NETWORKS

(54) Title (FR): CANAUX DE COMMANDE DE PRÉCODAGE DANS DES RÉSEAUX SANS FIL

(57) Abstract:

(EN): 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.

(FR): L'invention porte sur des systèmes et des méthodologies facilitant le précodage de signaux transmis sur des canaux de commande de liaison descendante afin de fournir une diversité de transmission. On peut de plus précoder un signal de référence dédié (DRF) lié à un dispositif sans fil de telle sorte que le dispositif sans fil puisse déterminer un précodeur ou des paramètres liés sur la base au moins en partie de la réalisation d'une estimation de canal pour le signal DRS précodé. Le dispositif sans fil

peut utiliser le précodeur déterminé ou des paramètres liés pour décoder des signaux précodés reçus sur des ressources de canal de commande de liaison descendante. De plus ou en variante, un point d'accès peut signaler une séquence de précodeurs au dispositif sans fil. Le point d'accès peut parcourir la séquence de précodeurs afin de précoder les signaux pour une transmission sur des ressources de canal de commande en liaison descendante, et le dispositif sans fil peut décoder les signaux sur la base au moins en partie d'un cyclage similaire par les précodeurs pour les signaux reçus.

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Declarations:

Declaration made as applicant's entitlement, as at the international filing date, to apply for and be granted a patent (Rules 4.17(ii) and 51bis.1(a)(ii)), in a case where the declaration under Rule 4.17(iv) is not appropriate

Declaration made as applicant's entitlement, as at the international filing date, to claim the priority of the earlier application, where the applicant is not the applicant who filed the earlier application or where the applicant's name has changed since the filing of the earlier application (Rules 4.17(iii) and 51bis.1(a)(iii))