

Title (en)

APPARATUS, AND ASSOCIATED METHOD, FOR FACILITATING ANTENNA WEIGHT SELECTION UTILIZING DETERMINISTIC PERTURBATION GRADIENT APPROXIMATION

Title (de)

VORRICHTUNG UND ZUGEORDNETES VERFAHREN ZUM ERMÖGLICHEN EINER ANTENNENGEWICHTSAUSWAHL UNTER VERWENDUNG EINER DETERMINISTISCHEN PERTURBATIONSGRADIENTENAPPROXIMATION

Title (fr)

APPAREIL ET PROCEDE ASSOCIE PERMETTANT DE FACILITER LA SELECTION DU POIDS D'UNE ANTENNE A L'AIDE D'UNE APPROXIMATION DE GRADIENT DE PERTURBATION DETERMINISTE

Publication

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Application

EP 03728913 A 20030515

Priority

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- US 14615902 A 20020515
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Abstract (en)

[origin: WO03098823A1] Apparatus, and an associated method, for facilitating selection of optimal antenna weightings by which to weight signals sent in a communication system that utilizes closed-loop transmit diversity. A deterministic perturbation gradient approximation technique is utilized in which perturbation vectors are selected (136) by a selector and applied, by an applicator, to antenna weighting elements. A selected set of perturbation vectors are applied to the antenna weighting elements in both a positive direction and a negative direction (138). A detector at a receiving station measures in disassociated with the signals communicated thereto, once weighted with the perturbation vectors. A single-bit feedback value is returned to the sending station, and the antenna weightings are appropriately adjusted (142). The technique is utilized during both non-handoff conditions and during handoff conditions.

IPC 1-7

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