

Title (en)
METHOD AND ARRANGEMENT FOR BEAM FORMING FOR THE DOWNLINK CHANNEL IN CDMA-BASED MOBILE RADIO TELEPHONE SYSTEMS

Title (de)
VERFAHREN UND ANORDNUNG ZUR STRAHLFORMUNG FÜR DEN DOWNLINK-KANAL IN CDMA-BASIERTEN MOBILFUNKSYSTEMEN

Title (fr)
PROCEDE ET DISPOSITIF DE MISE EN FORME DE FAISCEAU POUR LE CANAL DE LIAISON DESCENDANTE DANS DES SYSTEMES RADIOTELEPHONQUES DE TYPE AMRC

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Application
EP 00974312 A 20000906

Priority
• DE 0003121 W 20000906
• DE 19943688 A 19990906

Abstract (en)
[origin: WO0118976A2] The invention relates to a method for beam forming for the downlink channel in CDMA-based mobile radio telephone systems. The K most powerful paths are selected from paths with estimated directions and estimated power of the signals that are received by an antenna array in the base station, whereby said most powerful paths are selected for the uplink channel. The directional characteristic and directivity are calculated for said paths as well as for the paths whose power decreases (K-1). An iteration process is subsequently carried out in view of a threshold value which is determined according to the application and may not be exceeded. The signal that is designed for the mobile station and pertains to the base station is finally generated by multiplying the k<th> weight factor with the signal to be sent to the mobile station.

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