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 RADIOTELEPHONIQUES DE TYPE AMRC

Publication

EP 1214798 A2 20020619 (DE)

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.

IPC 1-7

H04B 1/707; H04B 7/08; H01Q 3/26

IPC 8 full level

H01Q 3/26 (2006.01); **H04B 1/707** (2011.01); **H04B 7/06** (2006.01); **H04B 7/08** (2006.01)

CPC (source: EP)

H01Q 3/2611 (2013.01); **H04B 7/0615** (2013.01); **H04B 7/086** (2013.01); H04B 7/0617 (2013.01); Y02D 30/70 (2020.08)

Citation (search report)

See references of WO 0118976A2

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

WO 0118976 A2 20010315; **WO 0118976 A3 20010802**; AU 1268001 A 20010410; DE 19943688 A1 20010412; DE 19943688 C2 20010913; EP 1214798 A2 20020619

DOCDB simple family (application)

DE 0003121 W 20000906; AU 1268001 A 20000906; DE 19943688 A 19990906; EP 00974312 A 20000906