

Title (en)
Adaptive antenna and a method of controlling an adaptive antenna beam

Title (de)
Adaptive Antenne und Verfahren zur Steuerung eines adaptiven Antennenstrahls

Title (fr)
Antenne adaptative et procédé de commande d'un faisceau d'antenne adaptative

Publication
EP 2819241 A2 20141231 (EN)

Application
EP 14460032 A 20140606

Priority
PL 40425413 A 20130607

Abstract (en)
An adaptive antenna, comprising at least two modules (H1, H2) and at least one column of radiators (1) arranged on each of the antenna modules, characterised in that the modules (H1 and H2) are arranged edgewise next to each other and each of the modules has at least 8 radiators (1) along a vertical axis of the module (H1, H2). The resulting axes of antenna azimuths divide a 120° angular sector into equal sectors. A method consists in that the beam is modified and the modulated LTE signal is transmitted. CQI value is determined by means of UE, the CQI being transmitted in UL return channel to all elements of the antenna. By means of BBU, a path corresponding to the highest CQI which is optimal for the beam is chosen. The modulated LTE signal is multiplied by controlling vectors [K] and [L] of a multiplier system in an RRH module, and then it is transmitted to the power divider (2), and subsequently to the radiators (1) of one polarisation.

IPC 8 full level
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CPC (source: EP)
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Citation (applicant)
• EP 2341577 A1 20110706 - UBIDYNE INC [US]
• WO 2013024852 A1 20130221 - NTT DOCOMO INC [JP], et al
• EP 2482582 B1 20130116 - ALCATEL LUCENT [FR]
• US 2011103504 A1 20110505 - MA ZHENGXIANG [US]

Designated contracting state (EPC)
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