

Title (en)

Error detection method and apparatus thereof

Title (de)

Fehlerdetektionsverfahren und Vorrichtung dafür

Title (fr)

Procédé de détection d'erreur et appareil correspondant

Publication

**EP 2219263 A1 20100818 (EN)**

Application

**EP 09290101 A 20090212**

Priority

EP 09290101 A 20090212

Abstract (en)

In a broad aspect, the invention relates to a method for cabling error detection in a base station coupled to an antenna array system, the antenna array system comprising a plurality of antenna elements and a plurality of antenna cables, the antenna cables coupling the base station with the antenna elements. The method comprises: obtaining an antenna parameter of each first and second antenna elements of said antenna array system, said antenna parameter indicating a phase shift between said first and second antenna elements; measuring an overall phase shift between each first and second antenna elements; and calculating said sum of phase shifts of each first and second antenna cables by subtracting said antenna parameter of said first and second antenna elements from said overall phase shift of said first and second antenna elements. The method further comprises: obtaining at least two results of a phase shift of at least said first antenna cable by combining different sums of phase shifts of said first and second antenna cables; comparing said two results of said phase shifts of each first antenna cable; and detecting cabling error if said two results differ by any value except 0 or PI.

IPC 8 full level

**H01Q 1/24** (2006.01); **H01Q 3/26** (2006.01)

CPC (source: EP)

**H01Q 1/246** (2013.01); **H01Q 3/267** (2013.01)

Citation (search report)

- [A] US 2007247363 A1 20071025 - PIESINGER GREGORY H [US]
- [A] WO 0102871 A1 20010111 - NOKIA NETWORKS OY [FI], et al
- [A] US 5657023 A 19970812 - LEWIS GIB F [US], et al

Cited by

CN102480329A; EP2943025A4; US9860772B2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA RS

DOCDB simple family (publication)

**EP 2219263 A1 20100818; EP 2219263 B1 20110504**; AT E508491 T1 20110515; DE 602009001237 D1 20110616

DOCDB simple family (application)

**EP 09290101 A 20090212**; AT 09290101 T 20090212; DE 602009001237 T 20090212