

Title (en)

VARIABLE BEAM CONTROLLING ANTENNA IN MOBILE COMMUNICATION BASE STATION

Title (de)

STRAHLVARIABLE STEUERUNGSANTENNE IN EINER MOBILKOMMUNIKATIONSBASISSTATION

Title (fr)

ANTENNE DE COMMANDE A FAISCEAU VARIABLE DANS UNE STATION DE BASE DE COMMUNICATION MOBILE

Publication

EP 1964206 A4 20110413 (EN)

Application

EP 06732817 A 20060405

Priority

- KR 2006001256 W 20060405
- KR 20050122797 A 20051213
- KR 20060022851 A 20060310

Abstract (en)

[origin: WO2007069809A1] An antenna for a mobile communication base station is provided. In a variable beam controlling antenna in a mobile communication base station, at least two radiator portions are arranged vertically, each having a reflector with at least one radiator installed therein. At least one force generator provides rotational force by an external control signal, and a force transfer portion transfers the rotational force generated from the force generator to at least one reflector and thus rotates the at least one reflector. According to the present invention, the variable beam controlling antenna can be fabricated with low cost and allows for easy automatic optimization required for a recent mobile communication wireless network because it is configured to be a one-column antenna capable of controlling a horizontal beam width.

IPC 8 full level

H01Q 1/24 (2006.01); **H01Q 3/04** (2006.01); **H01Q 3/36** (2006.01); **H01Q 19/10** (2006.01); **H01Q 21/08** (2006.01)

CPC (source: EP KR)

E04G 1/32 (2013.01 - KR); **E04G 21/14** (2013.01 - KR); **E04G 21/3252** (2013.01 - KR); **H01Q 1/246** (2013.01 - EP); **H01Q 3/04** (2013.01 - EP); **H01Q 3/36** (2013.01 - EP); **H01Q 19/10** (2013.01 - EP); **H01Q 21/08** (2013.01 - EP)

Citation (search report)

- [X] US 2004113861 A1 20040617 - JACKSON TIMOTHY [GB], et al
- [X] GB 2410838 A 20050810 - CSA LTD [GB]
- [I] US 6198458 B1 20010306 - HEINZ WILLIAM EMIL [NZ], et al
- [A] US 2005248495 A1 20051110 - WEBB DAVID B [US], et al
- See references of WO 2007069809A1

Cited by

EP3207593A4; EP3660982A1; EP3660982B1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2007069809 A1 20070621; BR PI0619778 A2 20111018; CN 101331647 A 20081224; CN 101331647 B 20130417; EP 1964206 A1 20080903; EP 1964206 A4 20110413; EP 1964206 B1 20121212; ES 2399909 T3 20130404; JP 2009519668 A 20090514; JP 4728404 B2 20110720; KR 100807321 B1 20080228; KR 20070062890 A 20070618

DOCDB simple family (application)

KR 2006001256 W 20060405; BR PI0619778 A 20060405; CN 200680047027 A 20060405; EP 06732817 A 20060405; ES 06732817 T 20060405; JP 2008545472 A 20060405; KR 20060022851 A 20060310