

Title (en)

MULTIBEAM ANTENNA FOR MOBILE TELEPHONE BASE STATION

Title (de)

MEHRSTRÄHLANTENNE FÜR MOBILTELEFONBASISSTATION

Title (fr)

ANTENNE À FAISCEAUX MULTIPLES POUR STATION DE BASE DE TÉLÉPHONIE MOBILE

Publication

EP 3116060 B1 20180919 (EN)

Application

EP 16178138 A 20160706

Priority

ES 201530973 A 20150707

Abstract (en)

[origin: EP3116060A1] A multibeam antenna for a mobile telephone base station which comprises, basically: a two-dimensional matrix of radiating elements (2) with double polarization, in which the radiating elements (2) are grouped in one-dimensional or multi-dimensional arrays (3a, 3b, ..) and where both the different arrays (3a, 3b, ..) of radiating elements (2) and the distribution networks are completely independent of each other in radioelectric terms, and in which the vertical and horizontal beam widths in each array of radiating elements can be personalised and optimised independently of the other beams, in such a way that each distribution network or phase shifter (5) has moving parts which change the phase given to the radiating elements (2), allowing dynamic variation in the azimuth angle of each array (3a, 3b, ..) in a completely independent manner.

IPC 8 full level

H01Q 1/24 (2006.01); **H01Q 3/32** (2006.01); **H01Q 21/28** (2006.01); **H01Q 25/00** (2006.01)

CPC (source: EP ES)

H01Q 1/246 (2013.01 - EP); **H01Q 3/30** (2013.01 - ES); **H01Q 3/32** (2013.01 - EP); **H01Q 21/24** (2013.01 - ES); **H01Q 21/28** (2013.01 - EP);
H01Q 25/00 (2013.01 - EP); **H01Q 25/002** (2013.01 - EP); **H01Q 3/005** (2013.01 - EP); **H01Q 21/061** (2013.01 - EP)

Cited by

CN110071373A; CN109273828A; CN111342234A; CN108767498A; CN110970731A; CN114447585A; US2022069461A1; US11641055B2;
WO2020063545A1; US11909103B2

Designated contracting state (EPC)

AL 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 RS SE SI SK SM TR

DOCDB simple family (publication)

EP 3116060 A1 20170111; EP 3116060 B1 20180919; ES 2550133 A1 20151104; ES 2550133 B1 20160909; ES 2701921 T3 20190226;
PT 3116060 T 20181212

DOCDB simple family (application)

EP 16178138 A 20160706; ES 16178138 T 20160706; ES 201530973 A 20150707; PT 16178138 T 20160706