

Title (en)
BASE STATION ANTENNA

Title (de)
BASISSTATIONSANTENNE

Title (fr)
ANTENNE DE STATION DE BASE

Publication
EP 3503285 A1 20190626 (EN)

Application
EP 17210459 A 20171222

Priority
EP 17210459 A 20171222

Abstract (en)
The invention relates to a multiple-in multiple-out (MIMO) base station antenna (100) for handling beamforming communications towards areas that are below and above the base station antenna, the base station antenna comprising: an antenna mounting frame (101) an elongated base portion (103) and a tilted base portion (105) extending from the elongated base portion (103), wherein the tilted base portion (105) has a first planar surface (107) and a second planar surface (109), the first planar surface (107) and the second planar surface (109) facing away from each other, wherein the first planar surface (107) is directed downwardly and wherein the second planar surface (109) is directed upwardly; a first array of antenna elements (111) arranged on or within the first planar surface (107), the first array of antenna elements (111) being configured for generating a downward transmission beam; and a second array of antenna elements (113) arranged on or within the second planar surface (109), the second array of antenna elements (113) being configured for generating an upward transmission beam.

IPC 8 full level
H01Q 1/12 (2006.01); **H01Q 1/24** (2006.01); **H01Q 21/06** (2006.01); **H04W 88/08** (2009.01); **H01Q 3/34** (2006.01)

CPC (source: EP)
H01Q 1/1242 (2013.01); **H01Q 1/246** (2013.01); **H01Q 21/061** (2013.01); **H01Q 3/34** (2013.01)

Citation (search report)
• [XA] US 6448930 B1 20020910 - JUDD MANO D [US]
• [YA] DE 102005063443 A1 20080103 - LEHMANN MARIO [DE]
• [YA] CN 205690233 U 20161116 - SHANGHAI FL SMART TECH CO LTD

Citation (examination)
• US 2015236778 A1 20150820 - JALALI AHMAD [US]
• US 2014274076 A1 20140918 - HYSLOP DOUGLAS [US], et al

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

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 3503285 A1 20190626; WO 2019120763 A1 20190627

DOCDB simple family (application)
EP 17210459 A 20171222; EP 2018081152 W 20181114