

Title (en)
DUAL-POLARIZED HORN RADIATOR

Title (de)
DUAL POLARISIERTER HORNSTRAHLER

Title (fr)
CORNET D'ÉMISSION À DOUBLE POLARISATION

Publication
EP 3533110 B1 20220316 (DE)

Application
EP 17808068 A 20171201

Priority
• DE 102016014385 A 20161202
• EP 2017081124 W 20171201

Abstract (en)
[origin: WO2018100133A1] The present invention relates to a dual-polarized horn radiator, in particular for a mobile radio base station, having a first and a second polarization which are fed separately from one another via a first hollow conductor and a second hollow conductor. According to a first aspect, it is provided that one of the hollow conductors and in particular the first hollow conductor extends in the emission direction with respect to its opening into the horn radiator and in that case has a cross-section which extends, in projection onto the aperture plane, partially inside and partially outside of the aperture opening of the horn radiator. According to a second aspect, it is provided that the two hollow conductors extend in the emission direction with respect to their openings into the horn radiator, wherein at least one of the hollow conductors and in particular the first hollow conductor has a transformation section, by which its polarization in the aperture plane is rotated with respect to the other hollow conductor before it opens into the horn radiator.

IPC 8 full level
H01Q 21/06 (2006.01); **H01Q 1/24** (2006.01); **H01Q 13/02** (2006.01); **H01Q 21/00** (2006.01); **H01Q 21/24** (2006.01); **H01Q 25/00** (2006.01)

CPC (source: EP KR US)
H01Q 1/24 (2013.01 - US); **H01Q 1/246** (2013.01 - KR US); **H01Q 13/02** (2013.01 - US); **H01Q 13/0225** (2013.01 - EP KR US); **H01Q 13/0258** (2013.01 - EP KR US); **H01Q 21/0025** (2013.01 - EP KR US); **H01Q 21/06** (2013.01 - US); **H01Q 21/064** (2013.01 - EP KR US); **H01Q 21/24** (2013.01 - EP KR US); **H01Q 25/00** (2013.01 - US); **H01Q 25/001** (2013.01 - EP KR US); **H01Q 1/246** (2013.01 - EP)

Citation (examination)
• US 5818396 A 19981006 - ANDERSON BRYANT FORD [US], et al
• US 2009213022 A1 20090827 - LIER ERIK [US], et al
• US 2010078203 A1 20100401 - LIER ERIK [US]

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)
WO 2018100133 A1 20180607; CN 110337758 A 20191015; CN 110337758 B 20211112; DE 102016014385 A1 20180607; EP 3533110 A1 20190904; EP 3533110 B1 20220316; KR 20190086533 A 20190722; US 11196178 B2 20211207; US 2020006863 A1 20200102

DOCDB simple family (application)
EP 2017081124 W 20171201; CN 201780085268 A 20171201; DE 102016014385 A 20161202; EP 17808068 A 20171201; KR 20197018203 A 20171201; US 201716466012 A 20171201