

Title (en)  
WIRELESS COMMUNICATION SYSTEM INCLUDING POLARIZATION-AGILE PHASED-ARRAY ANTENNA

Title (de)  
DRAHTLOSKOMMUNIKATIONSSYSTEM MIT POLARISATIONSSAGILER PHASENGESTEUERTER GRUPPENANTENNE

Title (fr)  
SYSTÈME DE COMMUNICATION SANS FIL COMPRENANT UNE ANTENNE RÉSEAU À COMMANDE DE PHASE AGILE EN POLARISATION

Publication  
**EP 3427342 A4 20190313 (EN)**

Application  
**EP 16898754 A 20161207**

Priority  
• RU 2016113669 A 20160411  
• KR 20160106383 A 20160822  
• KR 2016014287 W 20161207

Abstract (en)  
[origin: RU2629534C1] FIELD: radio engineering, communication.SUBSTANCE: monolithic-integrated antenna module of the millimeter range contains the plurality of antenna elements, the radio-frequency integrated circuit (RFIC) and the power circuit. Each of the mentioned antenna elements is the antenna element of the dual type, configured to initiate two modes of orthogonal polarization. The power circuit is configured to connect the ports of the mentioned RFIC to each of the dual type antenna elements to initiate two different polarization modes and beam forming.EFFECT: provision of the high amplification factor at small sizes and efficient use of the mobile device surface.16 cl, 13 dwg

IPC 8 full level  
**H01Q 1/24** (2006.01); **H01Q 3/26** (2006.01); **H01Q 13/08** (2006.01); **H01Q 13/18** (2006.01); **H01Q 13/22** (2006.01); **H01Q 21/24** (2006.01); **H01Q 21/28** (2006.01); **H01Q 25/00** (2006.01)

CPC (source: EP KR RU US)  
**H01Q 1/243** (2013.01 - EP KR US); **H01Q 3/26** (2013.01 - EP KR); **H01Q 13/085** (2013.01 - EP); **H01Q 13/18** (2013.01 - EP); **H01Q 13/22** (2013.01 - EP); **H01Q 21/00** (2013.01 - RU); **H01Q 21/20** (2013.01 - KR); **H01Q 21/24** (2013.01 - EP US); **H01Q 21/28** (2013.01 - EP); **H01Q 25/00** (2013.01 - EP); **H01Q 25/001** (2013.01 - KR)

Citation (search report)  
• [XAY] US 2016087348 A1 20160324 - KO SEUNG-TAE [KR], et al  
• [XAY] US 2015214633 A1 20150730 - PAN HELEN K [US]  
• [Y] US 5461392 A 19951024 - MOTT CHARLES J [US], et al  
• [Y] US 7589689 B2 20090915 - WELCH JOHN THOMAS [US], et al  
• See references of WO 2017179792A1

Cited by  
CN112599960A; CN114678684A; WO2018038559A1; US11450973B1; WO2021008690A1; WO2023004997A1; WO2023001375A1

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)  
CN 108886202 A 20181123; CN 108886202 B 20210713; EP 3427342 A1 20190116; EP 3427342 A4 20190313; EP 3427342 B1 20200226; KR 102589595 B1 20231017; KR 20170116558 A 20171019; RU 2629534 C1 20170829

DOCDB simple family (application)  
CN 201680084451 A 20161207; EP 16898754 A 20161207; KR 20160106383 A 20160822; RU 2016113669 A 20160411