

Title (en)  
ANTENNA CELL WITH TRANSMITTER NETWORK

Title (de)  
ANTENNENZELLE MIT SENDERNETZ

Title (fr)  
CELLULE D'ANTENNE A RESEAU TRANSMETTEUR

Publication  
**EP 4087060 A1 20221109 (FR)**

Application  
**EP 22170844 A 20220429**

Priority  
FR 2104867 A 20210507

Abstract (en)  
[origin: US2022359982A1] A transmitarray cell (105) comprises a first antenna element (105a) adapted to switching between two phase states, a second antenna element (105b) adapted to switching between two other phase states and between two circular polarization directions and a coupler (201) coupling the first antenna element to the second antenna element.

Abstract (fr)  
La présente description concerne une cellule (105) de réseau transmetteur comprenant :- un premier élément d'antenne (105a) adapté à commuter entre deux états de phase ; - un deuxième élément d'antenne (105b) adapté à commuter entre deux autres états de phase et entre deux sens de polarisation circulaire ; et- un coupleur (201) couplant le premier élément d'antenne au deuxième élément d'antenne.

IPC 8 full level  
**H01Q 3/46** (2006.01); **H01Q 21/24** (2006.01); **H01Q 1/28** (2006.01)

CPC (source: EP US)  
**H01Q 3/46** (2013.01 - EP US); **H01Q 15/02** (2013.01 - US); **H01Q 15/242** (2013.01 - US); **H01Q 19/06** (2013.01 - US); **H01Q 21/245** (2013.01 - EP); **H01Q 1/288** (2013.01 - EP US)

Citation (applicant)  
US 10680329 B2 20200609 - CLEMENTE ANTONIO [FR], et al

Citation (search report)

- [X] WO 2012085067 A1 20120628 - COMMISSARIAT ENERGIE ATOMIQUE [FR], et al
- [X] MUNINA I ET AL: "A Study of C-Band 1-Bit Reconfigurable Dual-Polarized Transmitarray", 2019 13TH EUROPEAN CONFERENCE ON ANTENNAS AND PROPAGATION (EUCAP), EUROPEAN ASSOCIATION ON ANTENNAS AND PROPAGATION, 31 March 2019 (2019-03-31), pages 1 - 5, XP033562128
- [A] MANZILLO FRANCESCO FOGLIA ET AL: "P-i-n Diode Based Electronically Steerable Transmitarrays for SOTM at Ka-Band", 2020 14TH EUROPEAN CONFERENCE ON ANTENNAS AND PROPAGATION (EUCAP), EURAAP, 15 March 2020 (2020-03-15), pages 1 - 5, XP033789189, DOI: 10.23919/EUCAP48036.2020.9135693
- [A] DIABY FATIMATA ET AL: "2 Bit Reconfigurable Unit-Cell and Electronically Steerable Transmitarray at \$K\$a\$ -Band", IEEE TRANSACTIONS ON ANTENNAS AND PROPAGATION, IEEE, USA, vol. 68, no. 6, 3 December 2019 (2019-12-03), pages 5003 - 5008, XP011791572, ISSN: 0018-926X, [retrieved on 20200601], DOI: 10.1109/TAP.2019.2955655

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

Designated validation state (EPC)  
KH MA MD TN

DOCDB simple family (publication)  
**EP 4087060 A1 20221109**; FR 3122780 A1 20221111; US 12003040 B2 20240604; US 2022359982 A1 20221110

DOCDB simple family (application)  
**EP 22170844 A 20220429**; FR 2104867 A 20210507; US 202217660849 A 20220427