

Title (en)  
COMMUNICATION APPARATUS AND COMMUNICATION METHOD

Title (de)  
KOMMUNIKATIONSVORRICHTUNG UND KOMMUNIKATIONSVERFAHREN

Title (fr)  
APPAREIL DE COMMUNICATION ET PROCÉDÉ DE COMMUNICATION

Publication  
**EP 4258557 A4 20240306 (EN)**

Application  
**EP 21921892 A 20210129**

Priority  
CN 2021074498 W 20210129

Abstract (en)  
[origin: EP4258557A1] This application provides a communication apparatus and a communication method, applied to a microwave transmission system. The communication apparatus includes a first orthogonal unit, a second orthogonal unit, and a rotation unit. A first end of the rotation unit is connected to the first orthogonal unit, and a second end of the rotation unit is connected to the second orthogonal unit. The rotation unit is configured to rotate the first orthogonal unit and/or the second orthogonal unit around a first direction. The first direction is a direction in which a signal is transmitted between the first end and the second end of the rotation unit. A coupling amount of the communication apparatus may be adjusted by controlling a relative rotation angle between the first orthogonal unit and the second orthogonal unit by the rotation unit, and an adjustment manner is simple and easy to operate, so that functions of a balanced communication apparatus and an unbalanced communication apparatus are realized. In addition, the coupling amount of the communication apparatus is independent of a frequency, so that flatness of the coupling amount of the communication apparatus in a channel is greatly improved.

IPC 8 full level  
**H01P 1/06** (2006.01); **H01P 1/161** (2006.01); **H01P 5/04** (2006.01); **H01P 5/18** (2006.01)

CPC (source: EP)  
**H01P 1/062** (2013.01); **H01P 1/161** (2013.01); **H01P 5/04** (2013.01); **H01P 5/181** (2013.01)

Citation (search report)

- [Y] US 2019373673 A1 20191205 - SHEN YING [US], et al
- [XYI] CLARKE J ET AL: "Experimental study of orthomode couplers for use in power combining and distribution", IEE PROCEEDINGS SECTIONS A A I., vol. 130, no. 5, 1 August 1983 (1983-08-01), pages 305 - 308, XP001366216
- [I] MONTERO J M ET AL: "C-Band antenna technology development - VPD", PREPARING FOR THE FUTURE, ESA, NOORDWIJK, NL, vol. 2, no. 4, 1 December 1992 (1992-12-01), pages 13 - 14, XP000336320, ISSN: 1018-8657
- See also references of WO 2022160290A1

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)  
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DOCDB simple family (application)  
**EP 21921892 A 20210129; CN 2021074498 W 20210129**