

Title (en)

FERRITE SWITCH, MICROWAVE ANTENNA, AND ELECTRONIC DEVICE

Title (de)

FERRITSCHALTER, MIKROWELLENANTENNE UND ELEKTRONISCHE VORRICHTUNG

Title (fr)

COMMUTATEUR EN FERRITE, ANTENNE HYPERFRÉQUENCE, ET DISPOSITIF ÉLECTRONIQUE

Publication

EP 4120469 A4 20230906 (EN)

Application

EP 21793047 A 20210420

Priority

- CN 202010320788 A 20200422
- CN 2021088413 W 20210420

Abstract (en)

[origin: EP4120469A1] This application provides a ferrite switch, a microwave antenna, and an electronic device. The ferrite switch includes a coupler, a first magic T, and two ferrite circulators. The ferrite circulators have first ports, second ports, and third ports, the second ports are connected to short-circuit loads, the first ports of the two ferrite circulators are respectively connected to two output ports of the coupler, the two output ports of the coupler are configured to output equi-amplitude in-phase or equi-amplitude phase-inverted power signals, and the third ports of the two ferrite circulators are respectively connected to two input ports of the first magic T; and after the equi-amplitude in-phase or equi-amplitude phase-inverted power signals are input from the two input ports of the first magic T, the power signals are output from two output ports of the first magic T respectively. Embodiments of this application provide a ferrite switch, a microwave antenna, and an electronic device, to resolve problems of a complicated structure and a high insertion loss of a reciprocal ferrite switch.

IPC 8 full level

H01P 1/11 (2006.01); **H01P 1/18** (2006.01); **H01P 1/393** (2006.01); **H01P 5/12** (2006.01); **H01Q 21/00** (2006.01)

CPC (source: CN EP)

H01P 1/11 (2013.01 - CN EP); **H01P 5/12** (2013.01 - EP); **H01Q 1/50** (2013.01 - CN); **H01P 1/181** (2013.01 - EP); **H01P 1/393** (2013.01 - EP); **H01Q 21/0006** (2013.01 - EP)

Citation (search report)

- [XAI] US 2009268642 A1 20091029 - KNOX MICHAEL E [US]
- [A] US 2017149551 A1 20170525 - KROENING ADAM M [US]
- [A] US 9711836 B1 20170718 - VELA RUSSELL [US]
- See references of WO 2021213385A1

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)

EP 4120469 A1 20230118; EP 4120469 A4 20230906; CN 113540710 A 20211022; CN 113540710 B 20220722; WO 2021213385 A1 20211028

DOCDB simple family (application)

EP 21793047 A 20210420; CN 202010320788 A 20200422; CN 2021088413 W 20210420