Title (en)

ANTENNA, ANTENNA MODULE, AND ELECTRONIC DEVICE

Title (de)

ANTENNE, ANTENNENMODUL UND ELEKTRONISCHE VORRICHTUNG

Title (fr)

ANTENNE, MODULE D'ANTENNE, ET DISPOSITIF ÉLECTRONIQUE

Publication

EP 4220863 A1 20230802 (EN)

Application

EP 21884595 A 20210819

Priority

- CN 202011193933 A 20201030
- CN 2021113438 W 20210819

Abstract (en)

This application provides an antenna, an antenna module, and an electronic device. The antenna includes a tapered slot antenna and a dipole antenna that have same polarization. The tapered slot antenna includes a feeding structure, a first metal structure, and a second metal structure. A tapered slot is formed between the first metal structure and the second metal structure. Two ends of the tapered slot are a narrow-slit end and a wide-mouth end. The feeding structure and the narrow-slit end are coupled to feed the tapered slot antenna, to excite the tapered slot antenna to be a directional antenna. The dipole antenna intersects with the tapered slot, and at an intersection position of the dipole antenna and the tapered slot, coupled feeding is performed on the dipole antenna by using the tapered slot, to excite the dipole antenna to be an omnidirectional antenna. In this application, the tapered slot antenna and the dipole antenna are integrated to implement miniaturization, and the tapered slot antenna feeds the dipole antenna, so that radiation performance of both the dipole antenna and the tapered slot antenna can be met.

IPC 8 full level

H01Q 21/06 (2006.01); **H01Q 1/22** (2006.01)

CPC (source: CN EP)

H01Q 1/22 (2013.01 - CN); **H01Q 1/2291** (2013.01 - EP); **H01Q 5/378** (2013.01 - EP); **H01Q 5/40** (2015.01 - EP); **H01Q 7/00** (2013.01 - EP); **H01Q 9/285** (2013.01 - EP); **H01Q 9/42** (2013.01 - EP); **H01Q 13/085** (2013.01 - EP); **H01Q 21/06** (2013.01 - CN); **H01Q 21/30** (2013.01 - EP)

Designated contracting state (EPC)

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BA ME

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KH MA MD TN

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DOCDB simple family (application)

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