

Title (en)  
ANTENNA DEVICE AND ANTENNA SYSTEM

Title (de)  
ANTENNENVORRICHTUNG UND ANTENNENSYSYSTEM

Title (fr)  
DISPOSITIF D'ANTENNE ET SYSTÈME D'ANTENNE

Publication  
**EP 4167381 A1 20230419 (EN)**

Application  
**EP 22201305 A 20221013**

Priority  
JP 2021170027 A 20211018

Abstract (en)  
An antenna device (100) includes: an antenna element (20) of a folded dipole antenna, the antenna element being a folded flat metal plate and having a folded structure; and a board (30) on which the antenna element is mounted. The antenna element includes an antenna element body (21). An unfolded shape of the antenna element body is in mirror symmetry with respect to a line of symmetry (L1). The antenna element body includes side parts (21a, 21b) parted by the line of symmetry, each of the side parts having four or more folding lines (B1 to B5).

IPC 8 full level  
**H01Q 9/26** (2006.01); **H01Q 1/32** (2006.01); **H01Q 21/28** (2006.01)

CPC (source: EP)  
**H01Q 1/3208** (2013.01); **H01Q 1/325** (2013.01); **H01Q 9/26** (2013.01); **H01Q 21/28** (2013.01)

Citation (applicant)  
JP 6131816 B2 20170524

Citation (search report)  
• [A] JP 2005260567 A 20050922 - DENSO CORP  
• [A] US 10396442 B2 20190827 - ELGHANNAI EZDEEN [US]  
• [A] ZHOU D ET AL: "Wideband balanced folded dipole antenna with a dual-arm monopole structure for mobile handsets", IET MICROWAVES ANTENNAS & PROPAGATION,, vol. 4, no. 2, 18 February 2010 (2010-02-18), pages 240 - 246, XP006034720, ISSN: 1751-8733, DOI: 10.1049/IET-MAP:20080412

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 ME MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA

Designated validation state (EPC)  
KH MA MD TN

DOCDB simple family (publication)  
**EP 4167381 A1 20230419**; JP 2023060425 A 20230428

DOCDB simple family (application)  
**EP 22201305 A 20221013**; JP 2021170027 A 20211018