

Title (en)

ANTENNA DEVICE, AND COMMUNICATION DEVICE

Title (de)

ANTENNENVORRICHTUNG UND KOMMUNIKATIONSVORRICHTUNG

Title (fr)

DISPOSITIF D'ANTENNE ET DISPOSITIF DE COMMUNICATION

Publication

**EP 4203190 A4 20231018 (EN)**

Application

**EP 20956347 A 20201002**

Priority

JP 2020037614 W 20201002

Abstract (en)

[origin: EP4203190A1] An antenna device includes a feed antenna element, and a housing that includes a parasitic antenna element extending to be electrically coupled to the feed antenna element and having a resonance frequency different from that of the feed antenna element.

IPC 8 full level

**H01Q 5/385** (2015.01); **H01Q 1/24** (2006.01); **H01Q 5/328** (2015.01); **H01Q 5/392** (2015.01); **H01Q 9/42** (2006.01)

CPC (source: EP)

**H01Q 1/243** (2013.01); **H01Q 5/328** (2015.01); **H01Q 5/385** (2015.01); **H01Q 5/392** (2015.01); **H01Q 9/42** (2013.01)

Citation (search report)

- [XY] US 2016056545 A1 20160225 - PARK SUNG KOO [KR], et al
- [X] US 2015222020 A1 20150806 - TAI SENG CHIN [US], et al
- [Y] JP 5603020 B2 20141008
- [A] US 2009128428 A1 20090521 - ISHIZUKA KENICHI [JP], et al
- See references of WO 2022070419A1

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 4203190 A1 20230628; EP 4203190 A4 20231018**; JP WO2022070419 A1 20220407; WO 2022070419 A1 20220407

DOCDB simple family (application)

**EP 20956347 A 20201002**; JP 2020037614 W 20201002; JP 2022553408 A 20201002