

Title (en)
DIELECTRIC FILTER, TRANSCEIVER, AND BASE STATION

Title (de)
DIELEKTRISCHES FILTER, SENDER-EMPFÄNGER UND BASISSTATION

Title (fr)
FILTRE DIÉLECTRIQUE, ÉMETTEUR-RÉCEPTEUR ET STATION DE BASE

Publication
EP 4254651 A4 20240214 (EN)

Application
EP 20965411 A 20201215

Priority
CN 2020136616 W 20201215

Abstract (en)
[origin: EP4254651A1] This application provides a dielectric filter, a transceiver, and a base station, to resolve problems of a limited layout of a dielectric filter topology and a poor out-of-band rejection capability, and further to achieve a flexible layout of a filter topology and improve the out-of-band rejection capability of the dielectric filter. The dielectric filter includes a dielectric body, and an input port, an output port, internal dielectric resonators, and external dielectric resonators that are disposed on the dielectric body, a plurality of internal dielectric resonators are disposed between the input port and the output port, and form a main-coupling-channel cascaded resonator; and two external dielectric resonators are disposed on one side of the input port, where an amount of coupling between the external dielectric resonator and the input port is greater than an amount of coupling between the external dielectric resonator and any of the internal dielectric resonators; and/or two external dielectric resonators are disposed on one side of the output port, where an amount of coupling between the external dielectric resonator and the output port is greater than an amount of coupling between the external dielectric resonator and any of the internal dielectric resonators.

IPC 8 full level
H01P 1/208 (2006.01); **H01P 1/205** (2006.01)

CPC (source: EP KR)
H01P 1/20309 (2013.01 - KR); **H01P 1/20363** (2013.01 - KR); **H01P 1/2056** (2013.01 - EP); **H01P 1/2084** (2013.01 - EP)

Citation (search report)

- [IA] US 7952452 B2 20110531 - MORGA JUSTIN RUSSELL [US]
- [A] US 2018301781 A1 20181018 - PENG JIE [CN], et al
- [A] US 2012286901 A1 20121115 - VANGALA REDDY [US]
- See also references of WO 2022126393A1

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 4254651 A1 20231004; **EP 4254651 A4 20240214**; CN 116547862 A 20230804; JP 2024501799 A 20240116; KR 20230119198 A 20230816; WO 2022126393 A1 20220623

DOCDB simple family (application)
EP 20965411 A 20201215; CN 2020136616 W 20201215; CN 202080107401 A 20201215; JP 2023536539 A 20201215; KR 20237023936 A 20201215