

Title (en)
CERAMIC DIELECTRIC FILTER

Title (de)
KERAMISCHER DIELEKTRISCHER FILTER

Title (fr)
FILTRE DIÉLECTRIQUE EN CÉRAMIQUE

Publication
EP 4037093 A4 20230607 (EN)

Application
EP 19919543 A 20190927

Priority
CN 2019108551 W 20190927

Abstract (en)
[origin: EP4037093A1] A ceramic dielectric filter is disclosed in the invention, the ceramic dielectric filter comprises at least one first resonant unit (100) and at least two second resonant units (200), each of the first resonant units (100) being provided with a first tuning blind hole (101) and a second tuning blind hole (102) on a first opening side surface, each of the second resonant units (200) being provided with a third tuning blind hole (201) on a second opening side surface, wherein a depth of the first tuning blind hole (101) and a depth of the second tuning blind hole (102) are both greater than a depth of the third tuning blind hole (201), the first resonant units (100) operate under TE₁₀₂ mode, the second resonant units (200) operate under TE₁₀₁ mode, and any one of the first resonant units (100) is at least capacitively coupled to one of the second resonant units (200), and at least inductively coupled to one of the second resonant units (200). The ceramic dielectric filter can realize capacitive coupling without additional accessories or structural features, so structure is simply and easily to implement, and has good frequency selection performance.

IPC 8 full level
H01P 1/208 (2006.01)

CPC (source: CN EP)
H01P 1/208 (2013.01 - CN); **H01P 1/2084** (2013.01 - EP)

Citation (search report)

- [A] CN 109950669 A 20190628 - MOBI TECH SHENZHEN CO LTD, et al
- [A] CN 110034362 A 20190719 - SUZHOU PERFECT COMMUNICATION TECH CO LTD
- [A] EP 3319166 A1 20180509 - HUAWEI TECH CO LTD [CN]
- See references of WO 2021056415A1

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

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EP 19919543 A 20190927; CN 2019108551 W 20190927; CN 201980001851 A 20190927