

Title (en)  
MULTI-MODE RESONATOR

Title (de)  
MULTIMODALER RESONATOR

Title (fr)  
RÉSONATEUR MULTIMODAL

Publication  
**EP 3721502 A4 20210714 (EN)**

Application  
**EP 17933954 A 20171208**

Priority  
CN 2017115227 W 20171208

Abstract (en)  
[origin: WO2019109335A1] Embodiments of the present disclosure relate to a multi-mode resonator. The multi-mode resonator comprises: a cavity; an upper support disposed in the cavity and oriented in a longitudinal direction; a lower support disposed in the cavity and aligned with the upper support in the longitudinal direction; and a dielectric core disposed between the upper support and the lower support and including a plurality of branches associated with a plurality of resonant modes; and at least one tuning screw disposed in the cavity associated with a branch of the dielectric core. The at least one tuning screw is tunable to adjust a resonant mode associated with the branch.

IPC 8 full level  
**H01P 7/10** (2006.01); **H01P 1/208** (2006.01)

CPC (source: EP)  
**H01P 1/2086** (2013.01); **H01P 7/105** (2013.01)

Citation (search report)

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- [X] EP 1858109 A1 20071121 - MATSUSHITA ELECTRIC IND CO LTD [JP]
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- [A] US 4623857 A 19861118 - NISHIKAWA TOSHIO [JP], et al
- See references of WO 2019109335A1

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

DOCDB simple family (publication)  
**WO 2019109335 A1 20190613**; CN 111448709 A 20200724; CN 111448709 B 20220304; EP 3721502 A1 20201014; EP 3721502 A4 20210714

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**CN 2017115227 W 20171208**; CN 201780097531 A 20171208; EP 17933954 A 20171208