

Title (en)  
NON-RECIPROCAL MICROWAVE COMPONENT

Title (de)  
NICHTREZIPROKE MIKROWELLENKOMPONENTE

Title (fr)  
COMPOSANT MICRO-ONDES NON RECIPROQUE

Publication  
**EP 4295443 A1 20231227 (FR)**

Application  
**EP 22710651 A 20220217**

Priority  
• FR 2101525 A 20210217  
• FR 2022050289 W 20220217

Abstract (en)  
[origin: WO2022175632A1] Disclosed is a non-reciprocal microwave component that includes three waveguides and a central resonator (6) having upper walls (12) and lower walls (14) around a resonance volume (10), each waveguide having an electromagnetic wave propagation zone, the central resonator and the waveguides being arranged so that electromagnetic waves circulate between the resonance volume and the propagation zone of the waveguides, and wherein: the upper and lower walls have upper conductive surfaces (26) and lower conductive surfaces (28) oriented towards the resonance volume and facing each other; the central resonator comprises two elements, one ferromagnetic and the other ferromagnetic or dielectric (15A, 15B), in the resonance volume, staggered in a direction (Z-Z) orthogonal to the upper wall and separated by a dielectric layer (30), one element being in contact with the upper conductive surface and the other element being in contact with the lower conductive surface.

IPC 8 full level  
**H01P 1/39** (2006.01)

CPC (source: EP)  
**H01P 1/39** (2013.01)

Citation (search report)  
See references of WO 2022175632A1

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Designated extension state (EPC)  
BA ME

Designated validation state (EPC)  
KH MA MD TN

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**FR 2101525 A 20210217**; EP 22710651 A 20220217; FR 2022050289 W 20220217