

Title (en)  
RESONATOR

Title (de)  
RESONATOR

Title (fr)  
RÉSONATEUR

Publication  
**EP 3787102 A1 20210303 (EN)**

Application  
**EP 19194435 A 20190829**

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Abstract (en)  
An apparatus is disclosed, comprising a dielectric substrate comprising first and second surfaces and first and second electrically conductive elements respectively provided on the first and second surfaces. A post wall is provided by a plurality of electrically conductive posts, each of which is on or passes through the substrate to interconnect the first and second electrically conductive elements, the post wall defining a waveguide region in the substrate. The apparatus may also comprise a resonator comprising one or more first resonator elements extending from the first electrically conductive element and into the waveguide region, the one or more first resonator elements not contacting the second electrically conductive element, and one or more second resonator elements extending from the second electrically conductive element and into the waveguide region, the one or more second resonator elements not contacting the first electrically conductive element.

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**H01P 1/205** (2013.01 - EP); **H01P 1/2053** (2013.01 - EP); **H01P 1/2084** (2013.01 - CN); **H01P 7/04** (2013.01 - EP); **H01P 7/10** (2013.01 - CN); **H01P 11/007** (2013.01 - CN)

Citation (search report)  
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• [XA] LIN-SHENG WU ET AL: "Compact quasi-elliptic bandpass filter based on folded ridge substrate integrated waveguide (FRSIW)", MICROWAVE CONFERENCE PROCEEDINGS (APMC), 2012 ASIA-PACIFIC, IEEE, 4 December 2012 (2012-12-04), pages 385 - 387, XP032316135, ISBN: 978-1-4577-1330-9, DOI: 10.1109/APMC.2012.6421606  
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