Abstracts

High-Q whispering gallery mode dielectric resonator bandpass filter with microstrip line coupling and photonic bandgap mode-suppression

Yu Ji, X.S. Yao and L. Maleki. "High-Q whispering gallery mode dielectric resonator bandpass filter with microstrip line coupling and photonic bandgap mode-suppression." 2000 Microwave and Guided Wave Letters 10.8 (Aug. 2000 [MGWL]): 310-312.

We describe a novel bandpass filter based on using whispering gallery (WG) modes in high-density dielectric resonators (DR). Microstrip line mode-coupling and photonic bandgap (PEG) suppression techniques are also features of this design. Based on this approach, we demonstrate a filter with center frequency of 13.7 GHz, Q of 2000, insertion loss of 7 dB, and attenuation of 30 dB.

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