

# Abstracts

## Narrow-Bandpass Waveguide Filters

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*A.E. Atia and A.E. Williams. "Narrow-Bandpass Waveguide Filters." 1972 Transactions on Microwave Theory and Techniques 20.4 (Apr. 1972 [T-MTT]): 258-265.*

A procedure is described whereby narrow-bandpass waveguide filters having ripple in both the passbands and stopbands can be synthesized in the form of coupled waveguide cavities.

Orthogonal modes in square or circular waveguides are employed to enable negative coupling elements to be realized. As a consequence, very compact filters can be constructed.

Experimental results on an 8-cavity orthogonal-mode narrow-bandpass filter are shown to agree well with theory.

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