Abstracts

Analysis, design, and experimental verification of microwave filters for safety issues in open-ended waveguide systems

P. Soto, V.E. Boria, J.M. Catala-Civera, N. Chouaib, M. Guglielmi and B. Gimeno. "Analysis, design, and experimental verification of microwave filters for safety issues in open-ended waveguide systems." 2000 Transactions on Microwave Theory and Techniques 48.11 (Nov. 2000, Part II [T-MTT] (Special Issue on Medical Application and Biological Effects of RF/Microwaves)): 2133-2140.

Safety issues must be seriously considered in the practical implementation of microwave industrial systems with open ports. To preserve the radiation of these open-ended waveguide systems into permissible levels, bandstop microwave filters are widely used. In this paper, the accurate analysis, design, and experimental verification procedure of such filters are extensively studied. A singly and a doubly corrugated filter for continuous flow microwave industrial systems are designed. Two prototypes of such devices have been manufactured and experimentally verified.

❑ Return to main document.