Abstracts

Fast and accurate C.A.D. of narrow band waveguide filters applying an electromagnetic segmentation method

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This paper outlines a segmentation method dedicated to filter design applying a finite element software. This method is particularly efficient, simple, accurate and fast to design dual-mode band-pass filters using simple models. Any numerical electromagnetic software can be used to realize the segmentation. At the end of the procedure, all the dimensions of the filter (cavities and irises) are known. The filter can be built without any modification of these dimensions during the tuning. The different stages of the procedure are described in this paper. Experimental results show good agreement with theoretical ones.

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