Microwave Ovens Leakage Reduction using Band-Reject Filter

Hayder S. Ahmed, University of Technology

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Microwave ovens have shown a dramatic use for domestic applications. Since it is necessary that the human is in the nearby areas when these appliances are working, there is an increased concern regarding the microwave oven leakage. The most probable leakage path is the gap between the microwave oven body and its door. This door should be projected for preventing electromagnetic leakage. The author displays the Band-Reject filter techniques and how were designed to reduce the microwave radiation. In this book, a new compact fractal Band-Reject filter designed at 2.45 GHz to diminish the microwave ovens leakage.

Hayder S. Ahmed received his B.Sc. and M.Sc. in Communications Engineering from University of Technology, Iraq in 2012 and 2016 respectively. His fields of interests are the miniaturization of microwave antenna and passive components for communication applications. He is a Member of IEEE and a Member of MTTs.

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Applying the Fractal Band-Reject Filter


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