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Paper Title: Diagnosis of Brain tumors, Lung tumors, and Breast Cancers by a Patch Fractal Antenna for Wireless Sensor

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Abstract

This paper presents the use of a multi-band antenna to reduce the cost of constructing diagnostic equipment. In this paper, we have studied and designed an antenna for diagnosing brain tumors, lung tumors, and breast cancers. The antenna was designed with genetic algorithms to determine the best value for an antenna structure operating in the 1, 3.8, and 5.8 GHz bands with a return loss of less than -10 dB for diseases: brain tumors, lung tumors, and breast cancers, respectively. For simulation results, CST Microwave Studio and MATLAB software were used. Results show that the desired antenna can achieve to diagnose diseases.