

Dielectric Imaging for Localisation and Detection of Breast Tumours

A.W. Preece, R.H. Johnson, J.L. Green and M.P. Robinson. "Dielectric Imaging for Localisation and Detection of Breast Tumours." 1993 MTT-S International Microwave Symposium Digest 93.2 (1993 Vol. II [MWSYM]): 1145-1146.

A new type of resonant dielectric sensor has been developed, which is non-invasive but has adequate depth sensitivity for the detection of tumours. In measurement ϵ' and ϵ'' are estimated from the changes in resonant frequency and Q factor respectively. A clinical measurement system has been tested on a breast tumour equivalent phantom and on patients and controls and has been shown to be capable of demonstrating the presence of a tumour.

 [Return to main document.](#)