Abstracts

Head Resonance: Numerical Solutions and Experimental Results

M.J. Hagmann, O.P. Gandhi, J.A. D'Andrea and I. Chatterjee. "Head Resonance: Numerical Solutions and Experimental Results." 1979 Transactions on Microwave Theory and Techniques 27.9 (Sep. 1979 [T-MTT]): 809-813.

We have used numerical solutions and experiments with phantom models of man, and experiments with the Long Evans rat to show the existence of head resonance. Greatest absorption in the head region of man occurs at a frequecy of about 375 MHz. Absorption is stronger for wave propagation from head to toe than it is when the electric field is parallel to the long axis. The highest absorption cross section for the human head is projected to be approximately 3.5 times its physical cross section.

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