Abstracts

An Empirical Relationship for Electromagnetic Energy Absorption in Man for Near-Field Exposure Conditions (Short Papers)

I. Chatterjee, M.J. Hagmann and O.P. Gandhi. "An Empirical Relationship for Electromagnetic Energy Absorption in Man for Near-Field Exposure Conditions (Short Papers)." 1981 Transactions on Microwave Theory and Techniques 29.11 (Nov. 1981 [T-MTT]): 1235-1238.

An empircal relationship is presented for the whole-body-average electromagnetic energy absorption in a 180-cell block model of man for near-field exposure conditions. Consideration is restricted to near fields with P polarization (no component of E directed arm-to-arm) in which the magnitude of the incident electric field is maximum immediately in front of the abdominal region. A highlight of this work is the considerably reduced whole-body average energy absorption for near-field partial-body exposures as compared to that obtained under plane-wave irradiation conditions.

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