

TABLE I

THE LOCAL SAR AT A REPRESENTATIVE POINT ($r' = b$, $\theta' = 175^\circ$, $\phi' = 0^\circ$) ON THE SURFACE OF THE DIELECTRIC SPHERE AS A FUNCTION OF THE SEPARATION BETWEEN THE SPHERES, COMPUTED FOR THE CASE OF WITH (P) AND WITHOUT (P_1) TAKING INTO ACCOUNT THE BODY-SOURCE COUPLING EFFECT

r_o (cm)	local SAR with body- source coupling $P = \frac{\sigma}{2} [\vec{E}, t(1)]^2$	local SAR with- out body- source coupling $P_1 = \frac{\sigma}{2} [\vec{E}, t(1)]^2$	percentage error $ P - P_1 /P$
45	0.64447 E-02	0.28990 E-02	55%
46	0.16250 E-02	0.10706 E-02	34
47	0.51297 E-03	0.40990 E-03	20
48	0.18170 E-03	0.15946 E-03	12
49	0.70320 E-04	0.67196 E-04	4
50	0.17606 E-04	0.27787 E-04	58
52	0.22385 E-04	0.15820 E-04	29
56	0.23736 E-04	0.25068 E-04	6
60	0.23513 E-04	0.24245 E-04	3

(Unit for P and P_1 : mW/kg).

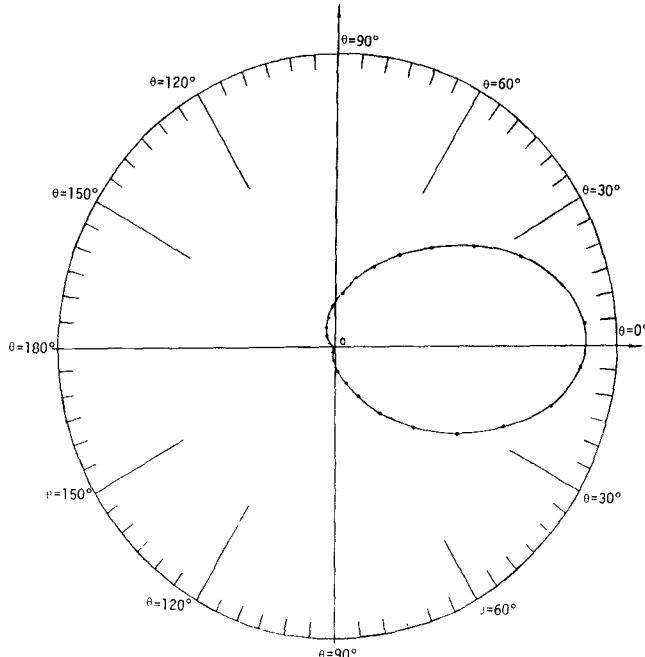


Fig. 1. E-plane radiation pattern maintained by a radiating slot on a conducting sphere of 20-cm radius at 2.45 GHz. Slot location: $\theta = 10^\circ$, $-30^\circ \leq \phi \leq 30^\circ$, and $r = 20$ cm

modified to be

$$A'^{(0)}_{mn} = -j \frac{m\alpha \cos m\alpha}{a(\pi^2 - 4m^2\alpha^2)} \frac{2n+1}{n(n+1)} \frac{(n-m)!}{(n+m)!} \frac{P_n^m(\cos \theta_0)}{h_n^{(2)}(k_0 a)} \quad (7)$$

$$B'^{(0)}_{mn} = \frac{\alpha k_0 \cos m\alpha}{\pi^2 - 4m^2\alpha^2} \frac{2n+1}{n(n+1)} \frac{(n-m)!}{(n+m)!} \frac{[P_n^m(\cos \theta_0)]'}{[ah_n^{(2)}(k_0 a)]'} \sin \theta_0. \quad (8)$$

The rest of the analysis is still valid.

This change will not alter the main finding of the paper that a significant error in the SAR estimation can occur if the body-source coupling is ignored. However, some numerical results are affected by this change. For example, the new results on the local SAR at a representative point on the dielectric sphere as a function of the separation between the conducting and dielectric spheres for the cases of with and without taking into account the body-source coupling are given in Table I, and the new radiation pattern from the slot on the conducting sphere is given in Fig. 1.

Correction to "Technology Summaries for Microwave Theory and Techniques—1983"

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In the October 1984 IEEE TRANSACTIONS ON MICROWAVE THEORY AND TECHNIQUES, the above paper,¹ a technology summary edited by B. E. Spielman, was published. This paper included inputs from the Technical Committees MTT-6, MTT-7, MTT-15, and MTT-16. A correction should be made to the "Microwave Systems—1983" section of the paper, pp. 1377–1378.

The title and contributors of the inputs from Committee MTT-16 should read as follows:

MICROWAVE SYSTEMS—1983

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G. SCHAFFNER, TELDYNE RYAN ELECTRONICS

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¹B. E. Spielman, *IEEE Trans. Microwave Theory Tech.*, vol. MTT-32, pp. 1372–1378, Oct. 1984.