

Fig. 2.

This is precisely what one would find from Lewin's formula for small L .

If this procedure is continued, one obtains

$$\Gamma \simeq -j \frac{L}{2} \sum_{n=0}^{\infty} j^n n! E. \quad (9)$$

This representation, although divergent for all values of L , represents Γ asymptotically for small values of L .

REFERENCES

- [1] L. Lewin, "Reflection cancellation in waveguides," *Wireless Engineer*, pp. 258-264, Aug. 1949.
- [2] S. O. Rice, "A set of second order differential equations associated with reflections in rectangular waveguides—Application to guide connected to horn," *Bell Syst. Tech. J.*, vol. 28, pp. 136-156, 1949.
- [3] D. J. Leonard and J. L. Yen, "Junction of smooth flared waveguides," *J. Appl. Phys.*, vol. 28, no. 12, pp. 1441-1448, Dec. 1957.
- [4] L. R. Walker and N. Wax, "Nonuniform transmission lines and reflection coefficients," *J. Appl. Phys.*, vol. 17, pp. 1043-1045, 1946.
- [5] K. Matsumaru, "Reflection coefficient of E -plane tapered waveguides," *IRE Trans. Microwave Theory and Tech.*, pp. 143-149, Apr. 1958.

Correction to "Analytical IC Metal-Line Capacitance Formulas"

W. H. CHANG

In the above paper,¹ equation (13) should have read

$$r_b \approx \eta + \frac{p+1}{2} \ln \Delta. \quad (13)$$

Equations (11)–(15) are valid for $w/h \geq 5$. If $5 > w/h \geq 1$, r_b should be iterated once by substituting that obtained from (13)

into the following iteration formula:

$$r_b = r_b - \sqrt{(r_b - 1)(r_b - p)} + (p + 1) \tanh^{-1} \sqrt{\frac{r_b - p}{r_b - 1}} - 2p^{1/2} \tanh^{-1} \sqrt{\frac{r_b - p}{p(r_b - 1)}} + \frac{\pi W}{2h} p^{1/2}$$

which was inadvertently omitted. The iterated r_b is then substituted in (11) to obtain the capacitance.

The last line on p. 610 should have read "... for $w/h \geq 0.5$ and $w/d \geq 0.5$."

The previous errors should be correspondingly corrected in the Summary Section.

Correction to "Electromagnetic Fields Induced Inside Arbitrary Cylinders of Biological Tissue"

T. K. WU AND L. L. TSAI

In the above paper,¹ Fig. 8 is not correct. The corrected Fig. 8 is presented here.

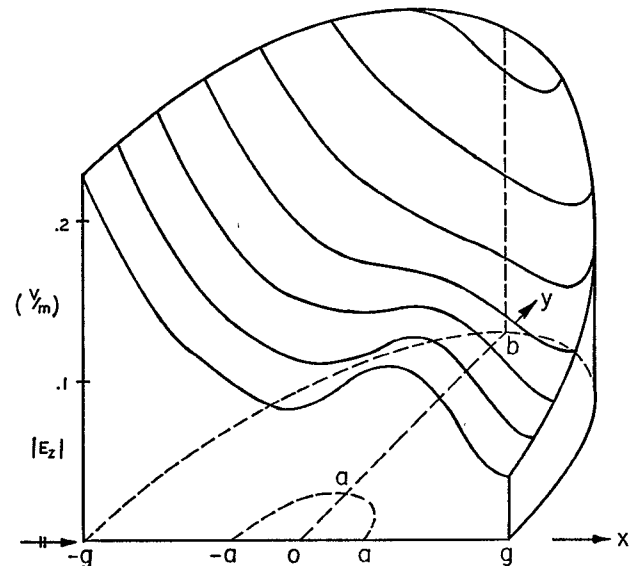


Fig. 8. E -field plot for a composite dielectric cylinder of elliptical muscle ($\epsilon_2 = 55$, $\sigma_2 = 1.1 \text{ } \Omega/\text{m}$, $g = 6.5 \text{ cm}$, $b = 9 \text{ cm}$, $f = 300 \text{ MHz}$) encasing circular bone ($\epsilon_3 = 6$, $\sigma_3 = 0.04 \text{ } \Omega/\text{m}$, $a = 2 \text{ cm}$, TM incident wave).

Manuscript received February 25, 1977.

The authors are with the Department of Electrical Engineering, University of Mississippi, University, MS 38677.

¹ T. K. Wu and L. L. Tsai, *IEEE Trans. Microwave Theory Tech.*, vol. MTT-25, pp. 61-65, Jan. 1977.

Manuscript received January 31, 1977; revised March 14, 1977.

The author is with IBM T. J. Watson Research Center, Yorktown Heights, NY.

¹ W. H. Chang, *IEEE Trans. Microwave Theory Tech.* (Lett.), vol. MTT-24, pp. 608-611, Sept. 1976.