Corrections

Corrections to "New Results for the Effective Propagation Constants of Nonuniform Plane Waves at the Planar Interface of Two Lossy Media"

Jasmin E. Roy

The same typographical error appears at three places in [1]. The square root should not appear in the expressions for D in the denominators of (34) and (35), and in the definition of D given after (36). The equations labeled here as (1), (2), and (3) (shown at the bottom of page) are the corrected expressions for (34), (35), and the definition of D, respectively.

For $\phi_\alpha = \phi_\beta \equiv \phi$, there results $\phi_I = 0$ from (2) and then $\phi_R = \phi$ from (1), as expected.

There is also a typographical error in the expression for the definition of C given after equation (39). The variable α_o should read α in the numerator. The equation labeled here as (4) is the corrected expression for the definition of C which is

$$\cos^2(\theta_R) + \sinh^2(\theta_I) = \frac{\alpha^2 \cos^2(\theta_\alpha) + \beta^2 \cos^2(\theta_\beta)}{\alpha_o^2 + \beta_o^2} = C. \quad (4)$$

Manuscript received April 28, 2005.

The author is with the Communications Research Centre Canada, Ottawa, ON K2H 8S2, Canada (e-mail: jasmin.roy@crc.ca).

Digital Object Identifier 10.1109/TAP.2005.856039

References

[1] J. E. Roy, "New results for the effective propagation constants of nonuniform plane waves at the planar interface of two lossy media," *IEEE Trans. Antennas Propag.*, vol. 51, no. 6, pp. 1206–1215, Jun. 2003.

$$\frac{\sin(\phi_R)}{\cosh(\phi_I)} \frac{1}{\sqrt{\cos^2(\phi_R) + \sinh^2(\phi_I)}} = \frac{\alpha^2 \sin^2(\theta_\alpha) \sin(\phi_\alpha) \cos(\phi_\alpha) + \beta^2 \sin^2(\theta_\beta) \sin(\phi_\beta) \cos(\phi_\beta)}{D} \quad (1)$$

$$\frac{\sinh(\phi_I)}{\cos(\phi_R)} \frac{1}{\sqrt{\cos^2(\phi_R) + \sinh^2(\phi_I)}} = \frac{\alpha\beta \sin(\theta_\alpha) \sin(\theta_\beta) \sin(\phi_\beta - \phi_\alpha)}{D} \quad (2)$$

where:

$$D = \alpha^2 \sin^2(\theta_\alpha) \cos^2(\phi_\alpha) + \beta^2 \sin^2(\theta_\beta) \cos^2(\phi_\beta) \quad (3)$$