Letters

Corrections to "Simultaneous Load-Pull of Intermodulation and Output Power Under Two-Tone Excitation for Accurate SSPA's Design"†

F. M. Ghannouchi, G. X. Zhau, and F. Beauregard

In the above paper,[1] printing errors occurred in Table I, which should have read as shown at the bottom of this page:

Correction to "High Gain Monolithic *W*-Band Low-Noise Amplifiers Based on Pseudomorphic High Electron Mobility Transistors"‡

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[1] F. M. Ghannouchi, G. X. Zhao, and F. Beauregard, *IEEE Trans. Microwave Theory Tech.*, vol. 42, no. 6, p. 932, June 1994.

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In the above paper,[2] Fig. 3. was printed upside down.

Corrections to "A New Electric Field Integral Equation for Heterogeneous Dielectric Bodies of Revolution"*

Mark S. Viola

In the above paper,[3] there are several typographical errors. Corrections to these misprints are delineated in that which follows.

In (7a), the terms "$\frac{1}{\rho}\frac{\partial G(\vec{r}|\vec{r}')}{\partial \rho}$" and "$\nabla_T G(\vec{r}|\vec{r}')$" should both be changed to read "$\frac{1}{\rho}\frac{\partial G(\vec{r}|\vec{r}')}{\partial \phi}$".

Identical notational misprints appear in both the sixth line of the text following (8) and in the second unnumbered equation following (8). In each case, the term "$G_s(r|r')$" should be replaced by "$G_s(\vec{r}|\vec{r}')$".

There is also a serious sign error in the third unnumbered equation following (8). That equation should be changed to read

$$\text{“}G_s(\vec{r}|\vec{r}') = -\frac{1}{4\pi j k_s \rho}\{e^{-jk_s R} - e^{-jk_s R_0}\}\text{”}.$$

Additionally, in the first line of the text following this equation, the term "$(z - z)^2$" should be changed to "$(z-z')^2$".

Finally, there are sign errors in (9) and (10). The right-hand sides of (9) and (10) should both be multiplied by -1.

[2] D-.W. Tu *et al.*, "High gain monolithic *W*-band low-noise amplifiers based on pseudomorphic high electron mobility transistors," *IEEE Trans. Microwave Theory Tech.*, vol. 42, no. 12, p. 25, Dec. 1994.

*Manuscript received February 2, 1995.

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IEEE Log Number 9412380.

[3] M. S. Viola, "A New electric field integral equation for heterogeneous bodies of revolution," *IEEE Trans. Microwave Theory Tech.*, vol. 43, no. 1, pp. 230–233, Jan. 1995.

TABLE I
SELECTION OF LOAD REFLECTION COEFFICIENT FOR THREE DIFFERENT DESIGN OBJECTIVES AND THEIR ASSOCIATE PERFORMANCE
Case 1: Optimum Γ_L^p for maximum output power.
Case 2: Optimum Γ_L^η for maximum power-added efficiency.
Case 3: A trade-off Γ_L^ι for an improvement of third-order intermodulation.
(The subscript s or t of the Γ_L indicates the single- or two-tone excitation, separately)

	Γ_L	P_L (dBm)	G_p (dBm)	η_{add} (%)	C/IM_3 (dBc)
Case 1	$\Gamma_{Ls}^p = 0.53\ \angle -89°$	$P_L(f_1) = 14.4$	$G_p(f_1) = 14.4$	32	16.6
	$\Gamma_{Lt}^p = 0.53\ \angle -90°$	$P_L(f_1, f_2) = 13.7$		29	16.6
		P_L (per tone) $= 10.7$	G_p (per tone) $= 13.7$		
Case 2	$\Gamma_{Ls}^\eta = 0.64\ \angle -125°$	$P_L(f_1) = 13.2$	$G_p(f_1) = 13.2$	40	15.5
	$\Gamma_{Lt}^\eta = 0.58\ \angle -113°$	$P_L(f_1, f_2) = 13.1$		32	15.7
		P_L (per tone) $= 10.1$	G_p (per tone) $= 13.1$		
Case 3	$\Gamma_{Ls}^\iota = 0.26\ \angle -168°$	$P_L(f_1) = 12.4$	$G_p(f_1) = 12.4$	26	22
	$\Gamma_{Lt}^\iota = 0.32\ \angle -64°$	$P_L(f_1, f_2) = 12.4$		22	22
		P_L (per tone) $= 9.4$	G_p (per tone) $= 12.4$		

*All cases: $P_{in}(f_1) = P_{in}(f_1, f_2) = 0$ dBm, P_{in} (per tone) $= -3$ dBm.