

Erratum

Erratum to “Electromagnetic Analysis and Validation of an Ironless Inductive Position Sensor”

Alessandro Danisi, *Graduate Student Member, IEEE*,
 Alessandro Masi, Roberto Losito, and Yves Perriard, *Senior Member, IEEE*

Due to a production error, several equations were printed incorrectly in the above paper [1]. Below are the correct versions of the equations.

$$\begin{aligned} \alpha &= \frac{R_s}{R_p}, \quad \beta = \frac{c}{R_p}, \quad k^2 = \frac{4\alpha}{(1+\alpha)^2 + \beta^2} \\ \phi(k) &= \left(\frac{2}{k} - k \right) K(k) - \frac{2}{k} E(k) \\ I_5 &= -\frac{j\omega}{Z_5} (M_{51}I_1 + M_{52}I_2) \end{aligned} \quad (2) \quad (7)$$

$$\begin{aligned} V_3 &= j\omega \left(M_{31}I_1 + M_{32}I_2 - \frac{j\omega M_{35}}{Z_5} M_{51}I_1 \right. \\ &\quad \left. - \frac{j\omega M_{35}}{Z_5} M_{52}I_2 \right) \\ V_4 &= j\omega \left(M_{42}I_2 + M_{41}I_1 - \frac{j\omega M_{45}}{Z_5} M_{51}I_1 \right. \\ &\quad \left. - \frac{j\omega M_{45}}{Z_5} M_{52}I_2 \right) \end{aligned} \quad (9)$$

REFERENCES

- [1] A. Danisi, A. Masi, R. Losito, and Y. Perriard, “Electromagnetic analysis and validation of an ironless inductive position sensor,” *IEEE Trans. Instrum. Meas.*, vol. 62, no. 5, pp. 1267–1275, May 2013.