Correction to the paper in Z. Anal. Anw. 13 (1994)3, 513 - 535

Asymptotic Expansions for Regularization Methods of Linear Fully Implicit Differential-Algebraic Equations

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Caused by a regrettable error of the editors, in the above paper on p. 521 two figures were missing. The corresponding passage has to be read as follows:

Example: Both parametrizations (2.14) and (2.20) have a nice interpretation for some differential-algebraic equations describing electrical networks. Consider the electrical circuit of Figure 1.
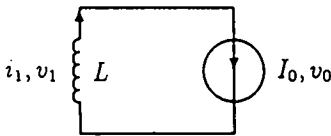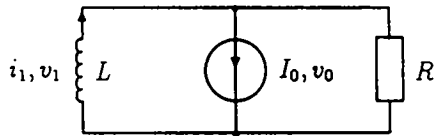

Figure 1   Figure 2

The circuit equations are

$$i_1' = -L^{-1}v_0$$
$$0 = i_1 - I_0.$$

Taking into account the inner resistance of the current source, a better model would be the circuit given in Figure 2 with a large R. Now, the equations read

$$i_1' = -L^{-1}v_0$$
$$0 = i_1 + LR^{-1}i_1' - I_0.$$

Letting $R = \varepsilon^{-1}L$ we just obtain (2.20). The parametrization (2.14) arises if, additionally, the inductivity L is perturbed by a factor $1 + \varepsilon$.

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