
δ' cancels out of all steady state equations (except I_D)

The steady state equations for I_D , \bar{V} and \bar{V}_T (the only equations in which δ' appears) are:

$$\bar{I}_D = \frac{1}{\delta'} k \bar{V} \bar{I}_T$$

$$\bar{V} = \frac{1}{c} (n \delta \bar{I} + D n \delta' \bar{I}_D)$$

$$\bar{V}_T = \frac{1}{c} (P D n \delta' \bar{I}_D)$$

It is clear that δ' appears in the numerator in \bar{V}_T and \bar{V} equations and in the denominator in the \bar{I}_D equation. Thus, δ' cancels out of the term $\delta' \bar{I}_D$.

So, δ' appears only in the steady state equations for I_D and not in the \bar{V}_T or \bar{V} equations. Furthermore, since I_D does not explicitly appear in any other equations we can be assured that δ' does not appear in the steady states on any other equation in Eqs. **1-6**.