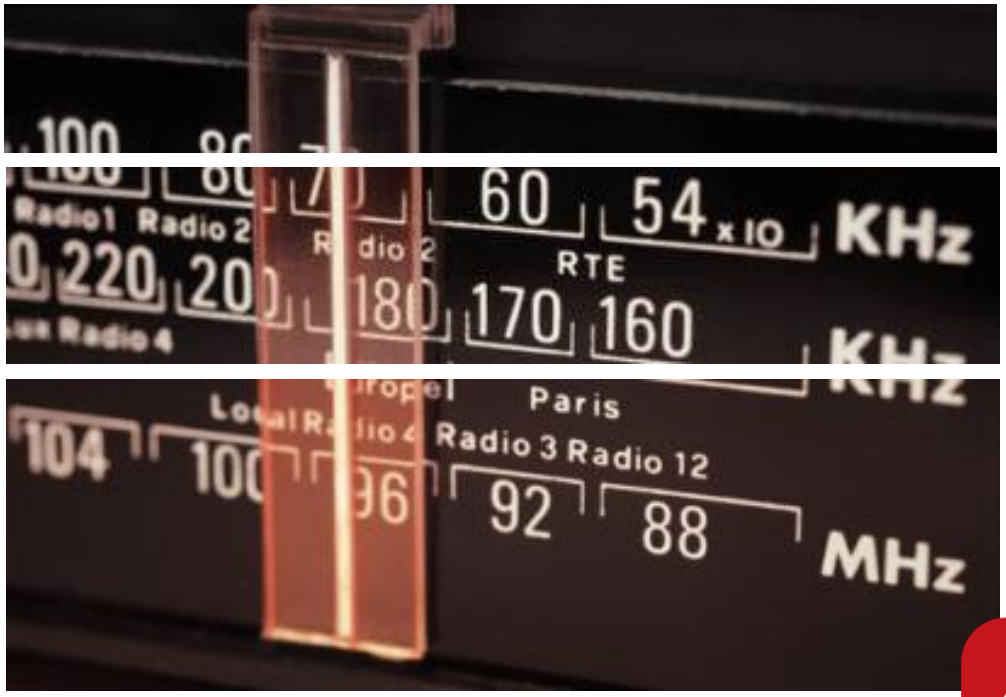

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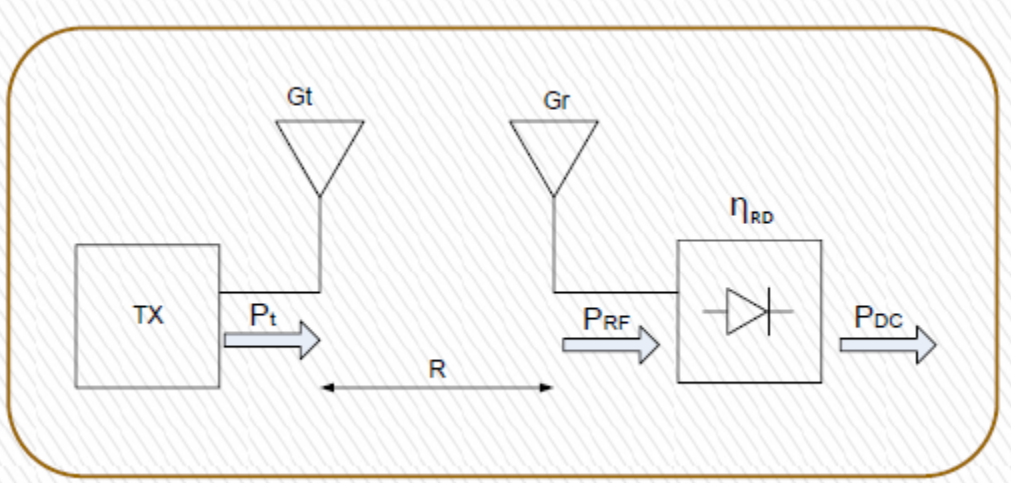
Wireless Power Transmission Link Evaluation



$$P_{DC} = \eta_{RD} P_t G_t G_r \left(\frac{\lambda}{4\pi}\right)^2 \frac{1}{R^n}$$

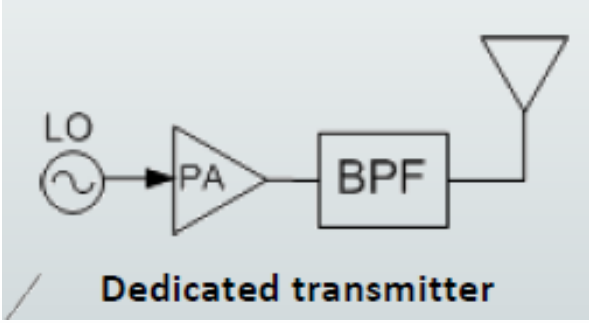
Increase P_{DC}

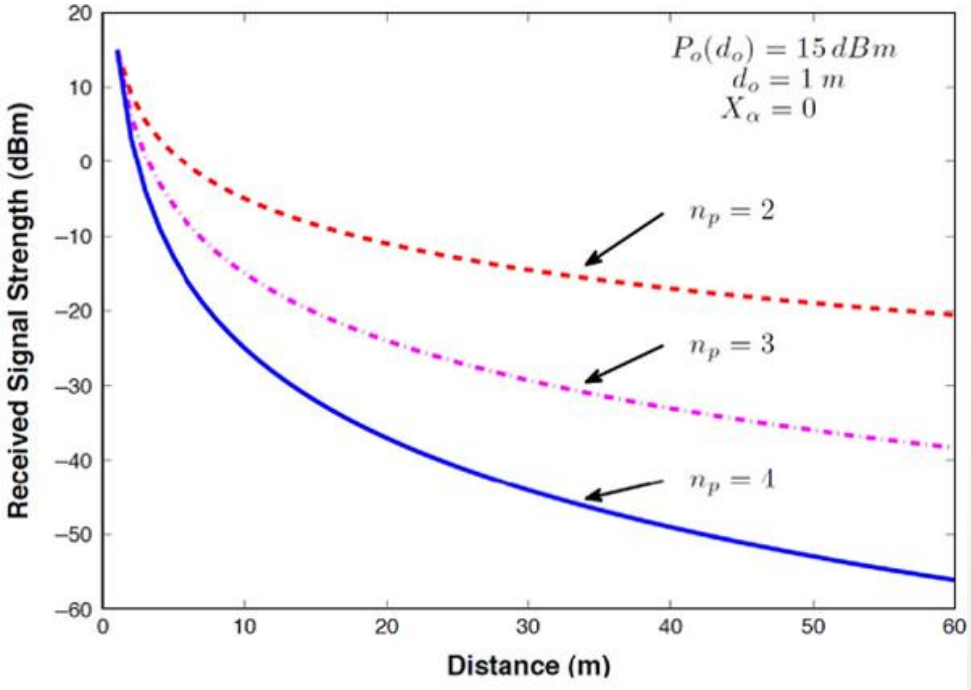
I. Increase transmitted Power
II. Increase antenna gains G_t and G_r
III. Increase RF-DC Efficiency

RF-DC Efficiency is given by: $\eta_{RD} = \frac{P_{DC}}{P_{RF_{Average}}}$

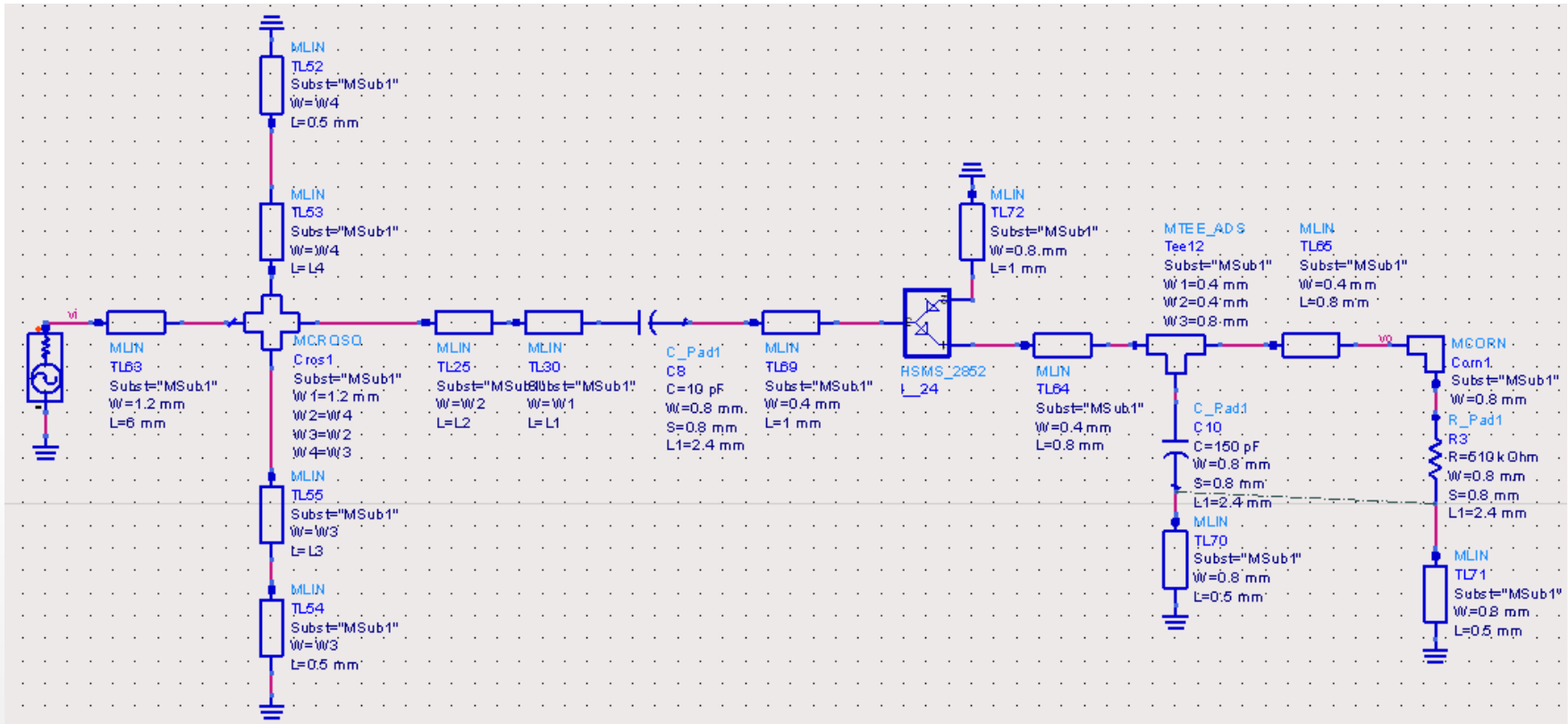
RF-DC Efficiency can be increased by designing improved RF circuits

Wireless Power Transmission Link Evaluation – Path Loss

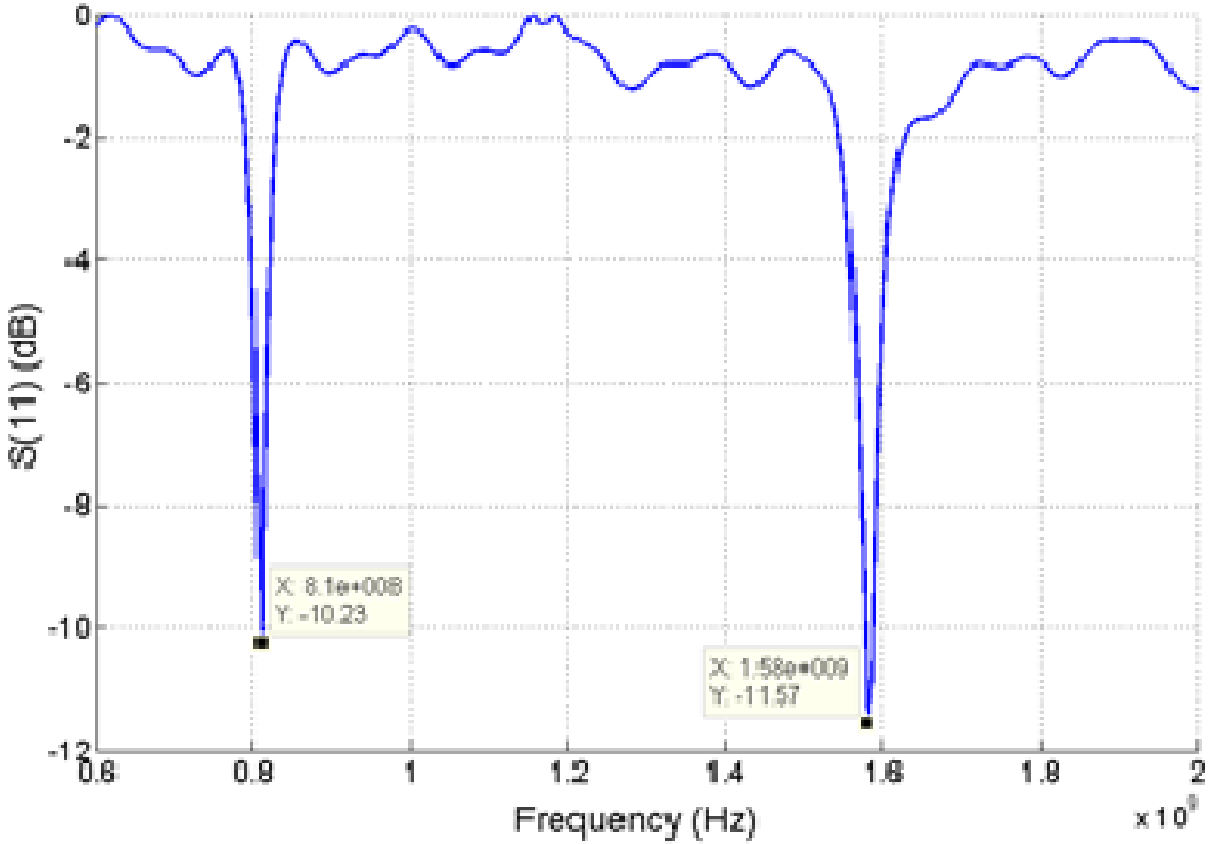




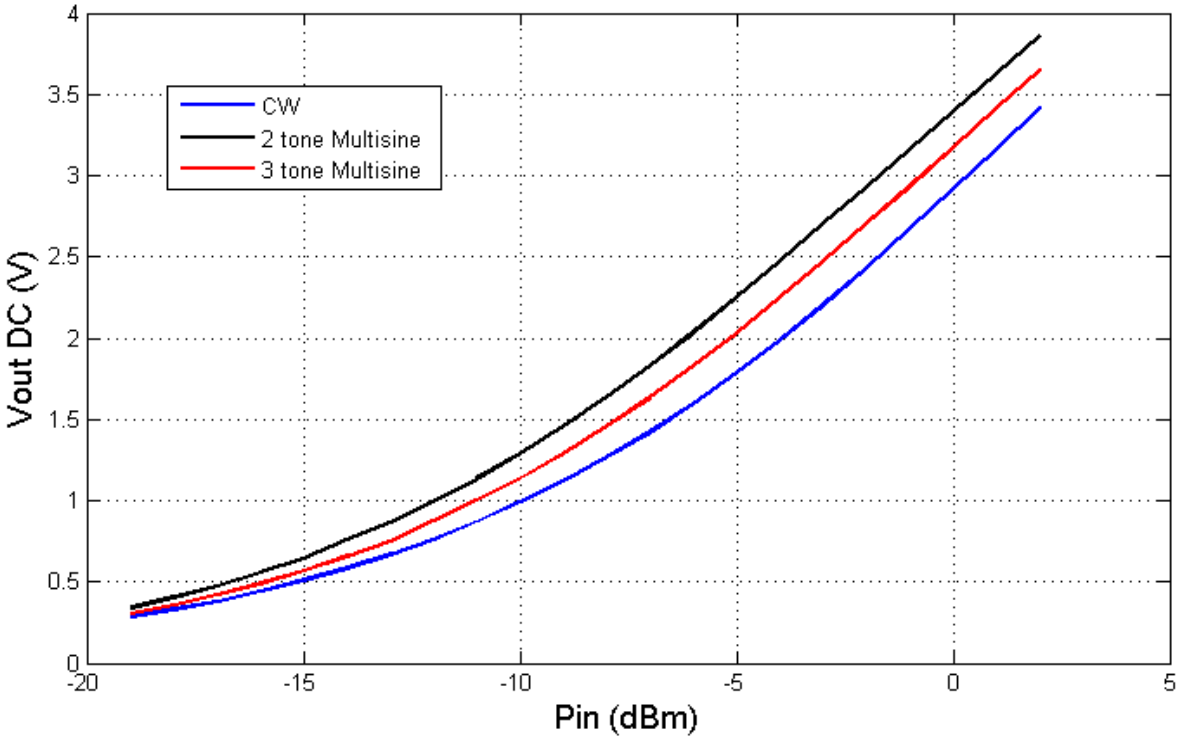
RF-DC Circuit Simulation



RF-DC Circuit Simulation – Input Matching



RF-DC Circuit Simulation – Output DC Curves



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