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(54) **Title:** POWER AMPLIFIER WITH TRANSISTOR INPUT MISMATCHING

(57) **Abstract:** A power amplifier includes an input module. The input module includes a transformer and is configured to receive a radio frequency signal and generate output signals. Impedance transformation modules each of which having an output impedance and configured to receive a respective one of the output signals from the transformer. Switch modules each of which comprising a transistor and connected to an output of one of the impedance transformation modules. The transistor has an input impedance and outputs an amplified signal. Each of the output impedances is mismatched relative to a respective one of the input impedances.



WO 2012/033731 A2