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(54) **SCALABLE PERIPHERY TUNABLE MATCHING POWER AMPLIFIER**

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(57) **ABSTRACT**

A scalable periphery tunable matching power amplifier is presented. Varying power levels can be accommodated by selectively activating or deactivating unit cells of which the scalable periphery tunable matching power amplifier is comprised. Tunable matching allows individual unit cells to see a constant output impedance, reducing need for transforming a low impedance up to a system impedance and attendant power loss. The scalable periphery tunable matching power amplifier can also be tuned for different operating conditions such as different frequencies of operation or different modes.