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(54) Title: MULTIPATH AMPLIFIER WITH COMPACT POWER SPLITTING AND COMBINING TRANSFORMERS

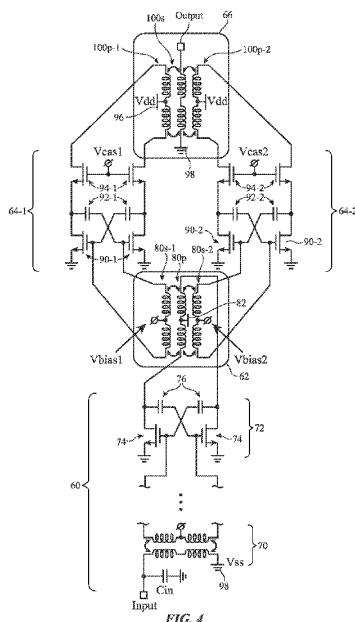


FIG. 4

(57) Abstract: Wireless circuitry is provided that includes at least a first amplifier, a second amplifier, and a power splitting transformer coupled to the first and second amplifiers. The first amplifier can include first input transistors, and the second amplifier can include second input transistors. The power splitting transformer can include a primary coil, a first secondary coil having terminals coupled to gate terminals of the first input transistors and having a center tap configured to receive a first bias voltage, and a second secondary coil having terminals coupled to gate terminals of the second input transistors and having a center tap configured to receive a second bias voltage. The first and second amplifiers may output signals to a power combining transformer. The power combining transformer can have a first primary coil, a second primary coil, and a secondary coil all disposed within a single compact transformer footprint.

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