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(54) Title: RESONANT PHASE-CONTROLLED OSCILLATOR

(57) Abstract: A resonant oscillator circuit includes an amplifier that includes a control input and a power output configured to deliver radio frequency (RF) power to a resonant load, and a feedback circuit. The feedback circuit includes a sensor coupled to the RF power, and a phase shifter coupled between the control input and the sensor. The sensor is configured to generate a feedback signal using the RF power. The phase shifter is configured to adjust a phase of the feedback signal to provide a conditioned feedback signal at the control input. The resonant oscillator circuit may be included as part of an RF system that includes a controller operatively coupled to the sensor and the phase shifter. The controller may be configured to control the phase shifter to adjust the phase of the feedback signal according to a sensor signal received from the sensor.

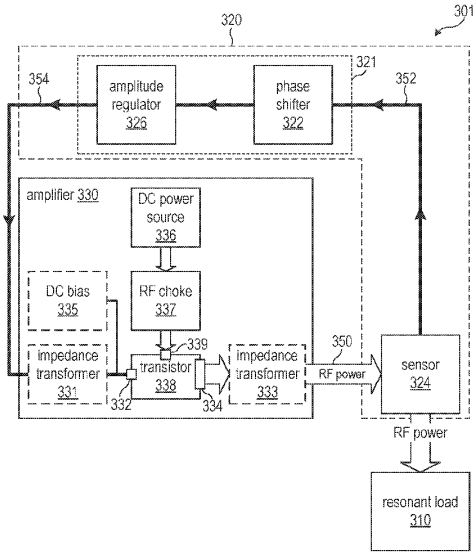


FIG. 3

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