

ABSTRACT

SYSTEM AND METHODS OF BIMODAL AUTOMATIC POWER AND FREQUENCY TUNING OF RF GENERATORS

A radio frequency generator includes a power control module, a frequency control module and a pulse generating module. The power control module is configured to generate a power signal indicating power levels for target states of a power amplifier. The frequency control module is configured to generate a frequency signal indicating frequencies for the target states of the power amplifier. The pulse generating module is configured to (i) supply an output signal to the power amplifier, (ii) recall at least one of a latest power level or a latest frequency for one of the target states of the power amplifier, and (iii) adjust a current power level and a current frequency of the output signal from a first state to a second state based on the power signal, the frequency signal, and at least one of the latest power level and the latest frequency of the power amplifier.

Fig. 2