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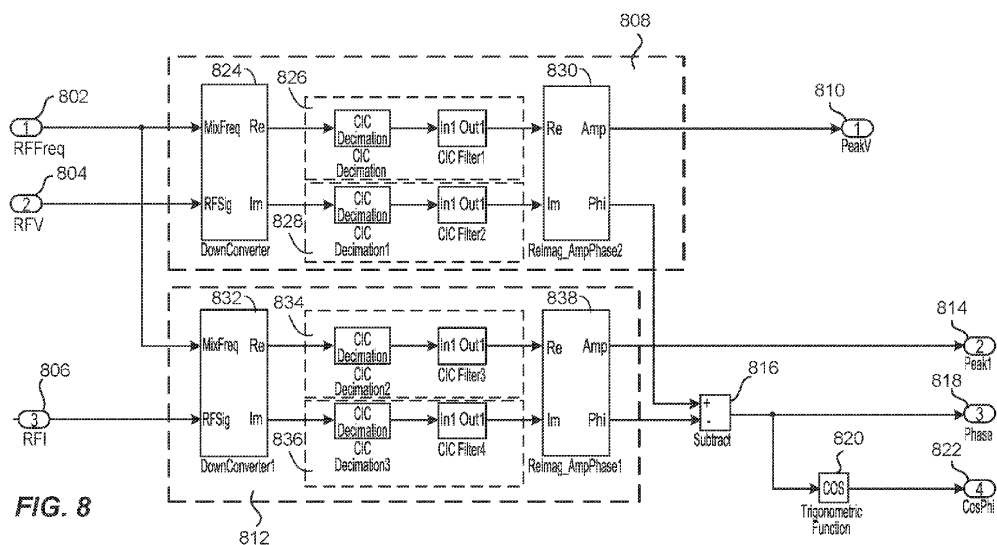


FIG. 8

(57) Abstract: An apparatus to estimate parameters of a radio frequency (RF) signal may include a voltage sensor configured to provide an indication of a voltage of the RF signal as well as a current sensor configured to provide an indication of current conducted by the RF signal. The apparatus may additionally include an analog-to-digital converter coupled to an output port of the voltage sensor and the current sensor, wherein the analog-to-digital converter is configured to provide digital representations of an instantaneous voltage and an instantaneous current of the RF signal. The apparatus may additionally include one or more processors configured to transform the digital representations of the instantaneous voltage and current into frequency domain representations of a complex voltage and complex current.

[Continued on next page]

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