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RADIO-FREQUENCY POWER PROTECTION**(71) Applicant: **Renesas Electronics America Inc.,**
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Milpitas, CA (US)(21) Appl. No.: **17/886,543**(22) Filed: **Aug. 12, 2022****Related U.S. Application Data**(60) Continuation of application No. 17/163,349, filed on
Jan. 30, 2021, now Pat. No. 11,444,584, which is a
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2200/451 (2013.01)(57) **ABSTRACT**

An apparatus includes an amplifier circuit and a protection circuit. The amplifier circuit may be configured to generate an output signal by amplifying an input signal received at an input port. The input signal may be a radio-frequency signal. The protection circuit may be configured to (i) generate a detection signal by detecting when a level of the input signal exceeds a corresponding threshold, where the level is a power level, a voltage level or both, (ii) route the input signal away from the input port of the amplifier circuit and disable the amplifier circuit both in response to the detection signal being continuously active at least a first time duration and (iii) route the input signal to the input port of the amplifier circuit and enable the amplifier circuit both in response to the detection signal being continuously inactive at least a second time duration.

