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(54) **A POWER AMPLIFIER, A RADIO FREQUENCY ELECTRONIC DEVICE AND A METHOD FOR OPERATING A POWER AMPLIFIER**

(57) A power amplifier (10) with adjustable voltage standing wave ratio is described which comprises an amplifier unit (16), a coupler (18) configured to obtain an incident power and a coupled reflected power, and a power control unit (20). The power control unit (20) is configured to control the amplifier unit (16). The power control unit (20) has two power detectors (22, 24) configured to provide actuating variables which correspond to the incident power and the reflected power, respectively. The power control unit (20) comprises two digital potentiometers (26, 28) which are configured to variably weight the actuating variables wherein the power control unit (20) is configured to determine a control variable for the amplifier unit (16) based on the actuating variables such that a predetermined power level related to a set value of the voltage standing wave ratio is not exceeded by the incident power and/or the reflected power. Further, a radio frequency electronic device and a method are described.

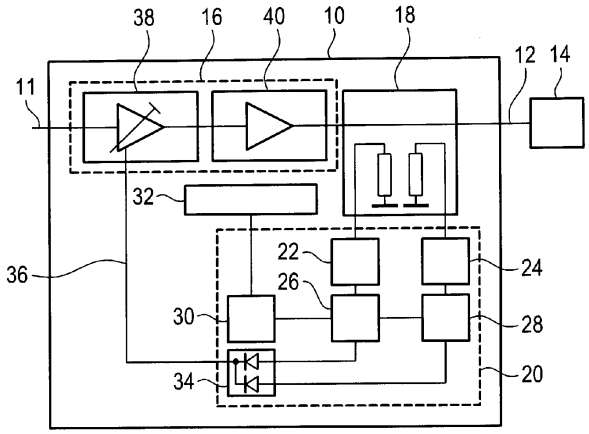

Fig. 1

EP 3 057 229 A8