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Correa et al.

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(54) **RF POWER AMPLIFIER AND METHOD OF ASSEMBLY FOR SAME**

(56) **References Cited**

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(57) **ABSTRACT**

In general, an RF power amplifier comprises a controller, a driver, a splitter, a final stage, and a combiner coupled together to function as the RF power amplifier. One or more of the above components are arranged on one or more motherboards, e.g., a printed circuit board (PCB). A heat sink defines a base of the RF power amplifier, and in some embodiments includes at least two grooves formed therein, wherein the electrical components of the splitter and electrical components of the controller fit within one or more of the grooves so that these components can substantially disposed within the heat sink. In some embodiments, a power rail is also provided, and is also disposed substantially within the heat sink. The power rail groove of the heat sink and the carrier of the final stage provide an EMI shield of the power rail.

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CPC **H03F 3/211** (2013.01)

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USPC 330/65, 66, 67, 68
See application file for complete search history.

21 Claims, 13 Drawing Sheets

