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(54) **DISTRIBUTION AMPLIFIER FOR A COMMUNICATION DEVICE**

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ABSTRACT

A distribution amplifier for a communication device such as a gateway is provided. The distribution amplifier can receive an input signal and provide multiple output signals. The distribution amplifier can have a transmission line that receives the input signal and multiple amplifier stages that are connected to the transmission line to receive the input signal. The output of the amplifier stages correspond to the output signals from the distribution amplifier. The transmission line has equally spaced connection points for the amplifier stages. The transmission line can be designed to have an impedance that results in the impedance of the transmission line with the connected amplifier stages having a final impedance that matches the input impedance to the transmission line.

