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(54) **Title**: FLEXIBLE DISTRIBUTED ANTENNA SYSTEM

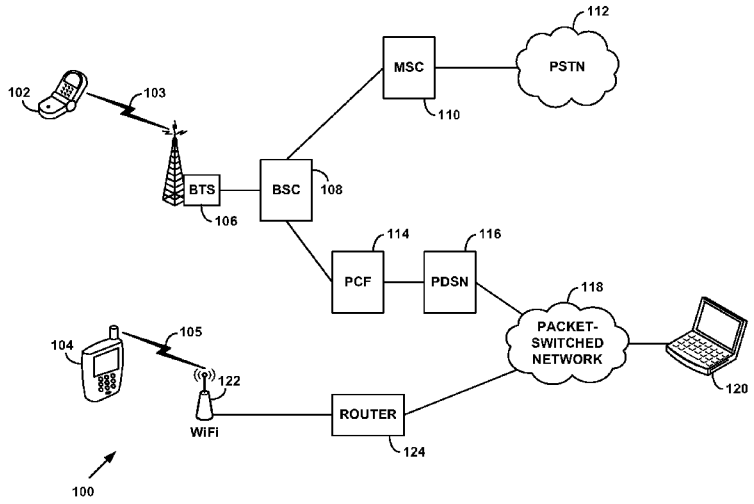



FIG. 1

(57) **Abstract**: An apparatus and method for implementing a flexible distributed antenna system (DAS) head end are disclosed. A flexible DAS head end includes an RF conditioning module configured to be connected to one or more base station transceiver (BTS) devices and one or more low-power RF modules that are also part of the flexible DAS head end. In an example embodiment, the flexible DAS head end receives high-power digital-RF passband transmissions from its connections to the one or more BTS devices, and low-power digital- RF passband signals from the one or more low-power RF modules. The low-power RF modules, in turn, can receive input baseband signals from one or more baseband units (BBUs) in a wireless network, and then convert the input signals to the Io low-power digital- RF passband signals. The RF conditioning module constructs one or more superposition RF signals from the passband signals, and routes and transmits them to an array of antenna nodes.

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