

DIVERSITY RECEIVER FRONT END SYSTEM WITH FLEXIBLE BAND ROUTING

ABSTRACT

Diversity receiver front end system with flexible band routing. A receiving system can include a plurality of amplifiers, each one of the plurality of amplifiers disposed along a corresponding one of a plurality of paths between an input of the receiving system and an output of the receiving system and configured to amplify a radio-frequency (RF) signal received at the amplifier. The receiving system can further include an input multiplexer configured to receive one or more RF signals at one or more input multiplexer inputs and to output each of the one or more RF signals to one or more of a plurality of input multiplexer outputs to propagate along a respective one or more of the plurality of paths. The receiving system can further include an output multiplexer configured to receive one or more amplified RF signals propagating along the respective one or more of the plurality of paths at one or more respective output multiplexer inputs and to output each of the one or more amplified RF signals to a selected one of a plurality of output multiplexer outputs. The receiving system can further include a controller configured to receive a band select signal and, based on the band select signal, control the input multiplexer and the output multiplexer.

[FIG. 7]