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(54) Title: SERIES-CONNECTED COUPLERS FOR ACTIVE ANTENNA SYSTEMS

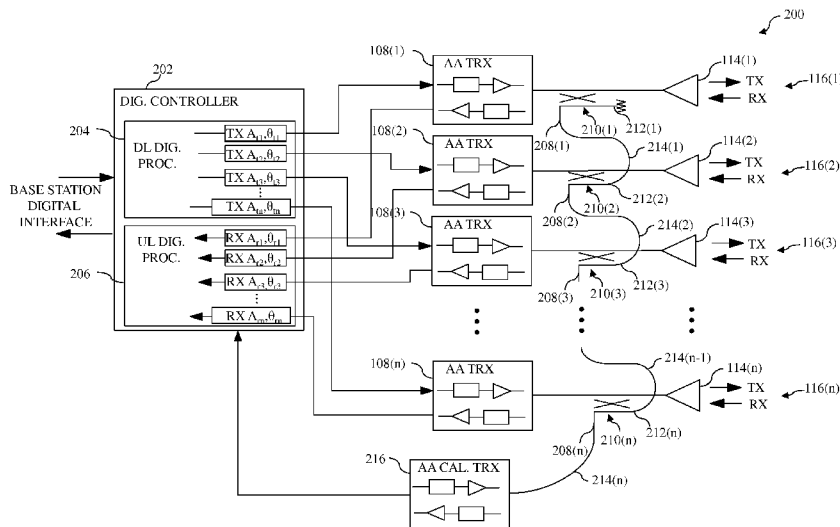


FIG. 2

(57) Abstract: In one embodiment, an antenna system has a plurality of antenna paths (116) and a calibration circuit. Each of the antenna paths has a transceiver (108) and an antenna element (114). The calibration circuit has (i) a calibration transceiver (216) and a different coupler (210) coupled to each antenna path. The couplers are connected in series with one another and with the calibration transceiver. Connecting the couplers in series, rather than in parallel, reduces the amount of cabling needed and the need for a combiner/splitter or switch matrix between the couplers and the calibration transceiver, thereby reducing the cost, volume, and/or weight associated with the calibration circuit.

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