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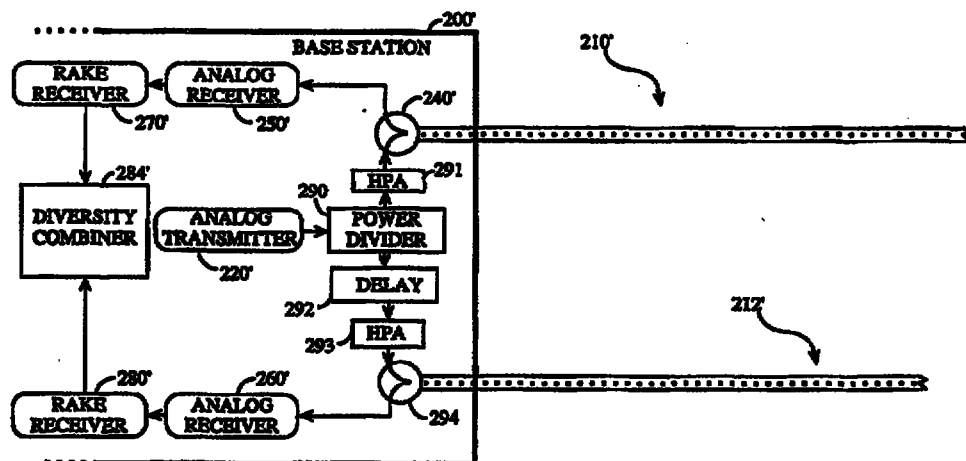
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(54) Title: LINEAR COVERAGE AREA ANTENNA SYSTEM FOR A CDMA COMMUNICATION SYSTEM



(57) Abstract

A linear coverage area antenna system for use within a CDMA communication system is disclosed herein. In a preferred implementation, two linear coverage area antenna structures (210', 212') are positioned in parallel and coupled to a base station (200'). Within the base station (200'), a transmitter (220') generates remote user directed spread spectrum signals, these signals being provided to the first and second linear coverage area antenna structures (210', 212') through an antenna interface. The antenna interface includes a time delay element (292) for introducing a predetermined time delay between components of the remote user directed spread spectrum signals transmitted by the first and second linear coverage area antenna structures (210', 212'), respectively. The base station (220') also further includes at least a first demodulation element (510A) for demodulating an aggregate spread spectrum signal comprised of a plurality of system user directed spread spectrum signals received by the first linear coverage area antenna structure (210') and a second demodulation element (515A) for demodulating a second aggregate spread spectrum signal comprised of a plurality of system user directed spread spectrum signals received by the second linear coverage area antenna structure (212').