

STACCATO PULSE EDGE CORRELATION

Abstract

The present invention discloses a system and method for mitigating multipath in DSSS CDMA radio navigation signals by a) transmitting a rapid pulsing pattern from a transmitting device to a position receiver that samples the transmitted signal, b) separating the received samples and storing sample-based correlation accumulation values into independent bins that are synchronous with the received pulsing pattern, c) applying a logical decision process to determine the accumulation bin associated with the leading edges of the received pulses, and d) generating a range estimate from the correlation accumulation bin associated with the leading edges of the received pulses.

Figure 3