

Title (en)
ENHANCED TIME OF ARRIVAL METHOD

Title (de)
ANKUNFTSZEIT-VERFAHREN

Title (fr)
PROCEDE DE TYPE INSTANT D'ARRIVEE AMELIORE

Publication
EP 0917655 A4 20010404 (EN)

Application
EP 96941929 A 19960810

Priority
US 9612836 W 19960810

Abstract (en)
[origin: WO9807045A1] A method for improving a radio location system based on time-of-arrival. Time-of-arrival radio location systems are limited in ultimate accuracy by signal-to-noise ratio and by the time varying multipath environment in which they must operate. The present invention teaches techniques which maintain a high signal-to-noise ratio while identifying a feature of the received signal which is least affected by multipath. The technique uses correlation peak/envelope information to estimate the leading edge of the correlation function (402), then enhances discrete samples at the leading edge of the correlation function to yield high signal-to-noise ratio readings (405-408). The present invention can reduce required transmitted bandwidth, increase system resolution and accuracy by twenty to one, and maintain high message traffic throughput.

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Citation (search report)

- No further relevant documents disclosed
- See references of WO 9807045A1

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