

Title (en)

SATELLITE-BASED POSITIONING SYSTEM RECEIVER FOR WEAK SIGNAL OPERATION

Title (de)

SATELLITENGESTÜTZTER NAVIGATIONSSYSTEMEMPFÄNGER FÜR SCHWACHSIGNALBETRIEB

Title (fr)

RECEPTEUR DE SYSTEME DE POSITIONNEMENT PAR SATELLITE POUR UN FONCTIONNEMENT EN SIGNAL FAIBLE

Publication

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Application

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Abstract (en)

[origin: WO0186318A1] A method, device and system for determining a receiver location using weak signal satellite transmissions. The invention involves a sequence of exchanges between an aiding source and a receiver that serve to provide aiding information to the receiver so that the receiver's location may be determined in the presence of weak satellite transmissions. With the aiding information, the novel receiver detects, acquires and tracks weak satellite signals and computes position solutions from calculated pseudo ranges despite the inability to extract time synchronization data from the weak satellite signals.

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