Title (en)
RADIO FREQUENCY RANGING APPARATUS.

Title (de)
FUNKENTFERNUNGSMESSGERÄT.

Title (fr)
DISPOSITIF DE TELEMETRIE A RADIOFREQUENCE.

Publication
EP 0641447 A1 19950308 (EN)

Application
EP 93910255 A 19930521

Priority
- GB 9301050 W 19930521
- GB 9210859 A 19920521

Abstract (en)
[origin: WO9323765A1] Radio frequency ranging apparatus comprises a transmitter having a pseudorandom noise (PN) code generator (10) and a modulator (20) to modulate a carrier frequency with the re-generated PN code for transmission. A receiver comprises a processing means incorporating a correlator to correlate a PN code recovered from a radio signal received from the transmitter, with a similar reference PN code. The receiver provides a time signal dependent on a propagation time for the radio signal between the transmitter and the receiver. The PN code generator is arranged to generate a plurality of PN codes having the same number of chips and a common chip rate. The PN codes are equally time shifted one from the next within the period of a single chip of the PN codes. The modulator is arranged to modulate a corresponding plurality of carrier signals with respective codes for transmission as respective radio signals. The receiver is arranged to receive the respective radio signals. The processing means includes combining means to combine the received PN codes to recover a high rate PN code having a chip rate which is the product of the common chip rate and the number of the received PN codes. The correlator is arranged to correlate the recovered higher rate PN code with a similar reference PN code.

IPC 1-7
G01S 11/08; G01S 5/10

IPC 8 full level
G01S 5/10 (2006.01); G01S 11/08 (2006.01)

CPC (source: EP)
G01S 5/10 (2013.01); G01S 11/08 (2013.01)

Citation (search report)
See references of WO 9323765A1

Designated contracting state (EPC)
AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)
WO 9323765 A1 19931125; EP 0641447 A1 19950308; GB 2267623 A 19931208; GB 2267623 B 19950830; GB 9210859 D0 19920923

DOCDB simple family (application)
GB 9301050 W 19930521; EP 93910255 A 19930521; GB 9210859 A 19920521