Title (en)

METHOD FOR PULSE WIDTH MODULATION OF A RADAR SYSTEM

Title (de)

VERFAHREN ZUR PULSBREITENMODULATION EINES RADARSYSTEMS

Title (fr)

PROCEDE DE MODULATION D'IMPULSION EN LARGEUR D'UN SYSTEME RADAR

Publication

EP 1309885 A1 20030514 (DE)

Application

EP 01974099 A 20010802

Prioritv

- DE 10039943 A 20000816
- EP 0108963 W 20010802

Abstract (en)

[origin: WO0214902A1] The invention relates to a method for operating a radar system. Radar systems are used for determing the distance of at least one reflecting object in an observation area and/or the speed of the at least one reflecting object. Said type of radar system emits successive pulses corresponding to a predetermined pulse duration with a specific pulse repetition frequency as emission signals in the observation area and receives the emission pulses of the emission signal reflected on the at least one reflecting object as a receiving signal. The disadvantage of such a method is that it involves a high signal dynamics, which has a negative effect on the price of circuit parts required for signal processing. The novel method for working the radar system should be developed via an economic means. According to the novel method the signal dynamics are reduced by predetermining the average output of the emission signal and by reducing the average output of the emission signal by variation, preferably by varying the pulse repetition frequency and/or the pulse duration of the emission pulse to the specific output range. The method is particularly suitable for operating a distance warning system for a motor vehicle.

[origin: WO0214902A1] The invention relates to a method for operating a radar system. Radar systems are used for determing the distance of at least one reflecting object in an observation area and/or the speed of the at least one reflecting object. Said type of radar system emits successive pulses corresponding to a predetermined pulse duration with a specific pulse repetition frequency as emission signals in the observation area and receives the emission pulses of the emission signal reflected on the at least one reflecting object as a receiving signal. The disadvantage of such a method is that it involves a high signal dynamics, which has a negative effect on the price of circuit parts required for signal processing. The novel method for working the radar system should be developed via an economic means. According to the novel method the signal dynamics are reduced by predetermining the average output of the emission signal and by reducing the average output of the emission, preferably by varying the pulse repetition frequency and/or the pulse duration of the emission pulse to the specific output range. The method is particularly suitable for operating a distance warning system for a motor vehicle.

IPC 1-7

G01S 13/522

IPC 8 full level

G01S 13/22 (2006.01); G01S 13/522 (2006.01)

CPC (source: EP US)

G01S 13/22 (2013.01 - EP US); G01S 13/522 (2013.01 - EP US)

Citation (search report) See references of WO 0214902A1

Designated contracting state (EPC) AT BE CH DE FR IT LI

DOCDB simple family (publication)

WO 0214902 A1 20020221; DE 10039943 A1 20020228; EP 1309885 A1 20030514; US 2004004567 A1 20040108; US 6844842 B2 20050118

DOCDB simple family (application)

EP 0108963 W 20010802; DE 10039943 A 20000816; EP 01974099 A 20010802; US 34487103 A 20030616