

Title (en)

SENSOR SYSTEM FOR MOTOR VEHICLES INCLUDING FMCW RADAR SENSORS FOR MEASURING DISTANCE TO AN OBJECT IN AN ANGLE-RESOLVED MANNER BY MEANS OF TRIANGULATION

Title (de)

SENSORSYSTEM FÜR KRAFTFAHRZEUGE MIT FMCW-RADAR SENSOREN ZUR WINKELAUFGELÖSTEN ENTFERNUNGSBESTIMMUNG EINES OBJEKTS MITTELS TRIANGULATION

Title (fr)

SYSTEME DETECTEUR DESTINE A DES VEHICULES AUTOMOBILES COMPORTANT DES DETECTEURS RADAR FMCW ET PERMETTANT DE DETERMINER LA DISTANCE AVEC RESOLUTION ANGULAIRE D'UN OBJET PAR TRIANGULATION

Publication

EP 1810053 A1 20070725 (DE)

Application

EP 05796970 A 20050908

Priority

- EP 2005054458 W 20050908
- DE 102004052518 A 20041029

Abstract (en)

[origin: WO2006045668A1] The invention relates to a device having a plurality of sensor modules (2, 2¹, 2², 2³, 2ⁿ) which are disposed at distances d₁, d₂ in relation to each other, every sensor module (2, 2¹, 2², 2³, 2ⁿ) having a local oscillator device. Said oscillator generates an oscillator signal which is forwarded to a transceiver and the oscillator signal is scattered. The transceiver is adapted to receive signals reflected by the object. A phase detection device is connected with one input to the oscillator device and with the other input to the transceiver. The phase detection device uses the oscillator signal and the received reflected signals to determine a phase signal. A control and signal processing device uses the distances of the sensor modules to each other and the phase signals to determine a direction a¹, a², a³, aⁿ of the object in relation to the sensor module.

IPC 8 full level

G01S 13/87 (2006.01); **G01S 13/34** (2006.01); **G01S 13/48** (2006.01); **G01S 13/931** (2020.01)

CPC (source: EP US)

G01S 7/0232 (2021.05 - EP); **G01S 7/0235** (2021.05 - EP); **G01S 13/345** (2013.01 - EP US); **G01S 13/48** (2013.01 - EP US); **G01S 13/87** (2013.01 - EP US); **G01S 13/931** (2013.01 - EP US); **G01S 13/003** (2013.01 - EP US); **G01S 13/584** (2013.01 - EP US); **G01S 2013/93271** (2020.01 - EP US)

Citation (search report)

See references of WO 2006045668A1

Designated contracting state (EPC)

DE ES FR GB IT SE

Designated extension state (EPC)

AL BA HR MK YU

DOCDB simple family (publication)

DE 102004052518 A1 20060504; CN 101052892 A 20071010; EP 1810053 A1 20070725; US 2008150790 A1 20080626; US 7764221 B2 20100727; WO 2006045668 A1 20060504

DOCDB simple family (application)

DE 102004052518 A 20041029; CN 200580037643 A 20050908; EP 05796970 A 20050908; EP 2005054458 W 20050908; US 66683205 A 20050908