

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

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Application

**EP 05796970 A 20050908**

Priority

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Abstract (en)

[origin: WO2006045668A1] The invention relates to a device having a plurality of sensor modules (2, 2<sup>1</sup>, 2<sup>2</sup>, 2<sup>3</sup>, 2<sup>n</sup>) which are disposed at distances d<sub>1</sub>, d<sub>2</sub> in relation to each other, every sensor module (2, 2<sup>1</sup>, 2<sup>2</sup>, 2<sup>3</sup>, 2<sup>n</sup>) 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 a<sup>1</sup>, a<sup>2</sup>, a<sup>3</sup>, a<sup>n</sup> of the object in relation to the sensor module.

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

See references of WO 2006045668A1

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