

Title (en)
METHOD AND SYSTEM FOR DETERMINING THE DISTANCE, SPEED, AND/OR DIRECTION OF MOVEMENT OF AN RFID TRANSPONDER

Title (de)
VERFAHREN UND SYSTEM ZUR BESTIMMUNG DER ENTFERNUNG, DER GESCHWINDIGKEIT UND/ODER DER BEWEGUNGSRICHTUNG EINES RFID-TRANSPONDERS

Title (fr)
PROCÉDÉ ET SYSTÈME POUR DÉTERMINER LA DISTANCE, LA VITESSE ET/OU LA DIRECTION DE DÉPLACEMENT D'UNE ÉTIQUETTE RFID

Publication
EP 2396670 A1 20111221 (DE)

Application
EP 09782850 A 20090910

Priority
• EP 2009061729 W 20090910
• DE 102009008174 A 20090210

Abstract (en)
[origin: WO2010091746A1] The invention relates to a method and a system for determining the distance, speed, and/or direction of movement of an RFID transponder. The transponder is interrogated by an RFID reading device as commonly known, so the reading device transmits a power supply carrier signal that is modulated during some phases. A radar module simultaneously transmits a radar signal which is received and reflected by the transponder. The reflected radar signal is finally received again by the radar module. The position of the RFID transponder can be determined from the reflected, received radar signal. The radar signal is transmitted especially when no interrogation data is modulated onto the power supply carrier signal. Furthermore, the power supply carrier signal and the radar signal have different frequencies.

IPC 8 full level
G01S 13/58 (2006.01); **G01S 13/62** (2006.01); **G01S 13/75** (2006.01); **G01S 13/82** (2006.01); **G01S 13/86** (2006.01); **G01S 13/87** (2006.01)

CPC (source: CN EP US)
G01S 13/584 (2013.01 - CN EP US); **G01S 13/75** (2013.01 - CN EP US); **G01S 13/825** (2013.01 - CN EP US); **G01S 13/86** (2013.01 - CN EP US); **G01S 13/878** (2013.01 - CN EP US); **G01S 13/62** (2013.01 - EP US)

Citation (search report)
See references of WO 2010091746A1

Citation (examination)
DE 102005037582 A1 20070222 - SIEMENS AG [DE]

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

DOCDB simple family (publication)
DE 102009008174 A1 20100819; CN 102301256 A 20111228; CN 105022058 A 20151104; EP 2396670 A1 20111221; US 2012050016 A1 20120301; WO 2010091746 A1 20100819

DOCDB simple family (application)
DE 102009008174 A 20090210; CN 200980155543 A 20090910; CN 201510334445 A 20090910; EP 09782850 A 20090910; EP 2009061729 W 20090910; US 200913148915 A 20090910