Title (en)
METHOD AND DEVICE FOR DETERMINING A DISTANCE TO AN OBJECT

Title (de)
VERFAHREN UND VORRICHTUNG ZUM BESTIMMEN EINER ENTFERNUNG ZU EINEM OBJEKT

Title (fr)
PROCÉDÉ ET DISPOSITIF POUR DÉTERMINER UNE DISTANCE PAR RAPPORT À UN OBJET

Publication
EP 2238470 A1 20101013 (DE)

Application
EP 09706836 A 20090127

Priority
• EP 2009050887 W 20090127
• DE 102008008064 A 20080201
• DE 102008014274 A 20080303

Abstract (en)
[origin: WO2009095383A1] The invention relates to a method for determining a distance (d) to an object (20), said method comprising the following steps: transmitting a transmission light beam (18) by means of a light transmitter (12), receiving a reception light beam (24) by means of a light receiver (14), the reception light beam (24) being produced by reflection of the transmission light beam (18) on the object (20), and determining the distance (d) using a run-time of the transmission and reception light beam (18, 24), the transmission light beam (18) being amplitude-modulated with a rectangular wave-shaped modulation signal (66; 74), and the modulation signal (66; 74) having a plurality of rectangular pulses (68; 68') that occur in a plurality of groups (76; 76'). The method according to the invention is characterized in that the groups (76; 76') occur in varying intervals (PA) relative each other and have changing numbers of rectangular pulses (68; 68').

IPC 8 full level
G01S 7/491 (2020.01); **G01S 7/4911** (2020.01); **G01S 17/36** (2006.01)

CPC (source: EP US)
G01S 7/491 (2013.01 - EP US); **G01S 7/4911** (2013.01 - EP US); **G01S 17/36** (2013.01 - EP US); G01S 17/42 (2013.01 - EP US)

Citation (search report)
See references of WO 2009095383A1

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 TR

Designated extension state (EPC)
AL BA RS

DOCDB simple family (publication)
DE 102008014274 A1 20090806; **DE 102008014274 B4 20200709**; CN 101932953 A 20101229; CN 101932953 B 20130522; EP 2238470 A1 20101013; JP 2011522216 A 20110728; JP 5306376 B2 20131002; US 2010195086 A1 20100805; US 8064046 B2 20111122; WO 2009095383 A1 20090806

DOCDB simple family (application)
DE 102008014274 A 20080303; CN 200980103852 A 20090127; EP 09706836 A 20090127; EP 2009050887 W 20090127; JP 2010544678 A 20090127; US 69783710 A 20100201