

Title (en)  
SPAD-BASED LIDAR SYSTEM

Title (de)  
SPAD-BASIERTES LIDAR-SYSTEM

Title (fr)  
SYSTÈME LIDAR À BASE DE SPAD (PHOTODIODES AVALANCHE À PHOTON UNIQUE)

Publication  
**EP 3602124 A1 20200205 (DE)**

Application  
**EP 18712567 A 20180319**

Priority  
• DE 102017204586 A 20170320  
• EP 2018056843 W 20180319

Abstract (en)  
[origin: WO2018172258A1] The invention relates to a LIDAR system comprising a transmitting device for light; a receiving device for light, having a first and a second photon detector; and an evaluation device, which is configured to determine a time period between the emission of light by means of the transmitting device and the incidence of the light reflected at an object on the receiving device. The transmitting device is configured to emit superimposed horizontally and vertically polarized light; the first photon detector is configured for the detection of only horizontally polarized light, and the second photon detector is configured for the detection of only vertically polarized light; in addition, the evaluation device is configured to determine the time period on the basis of light which is incident on both photon detectors within a predetermined interval.

IPC 8 full level  
**G01S 17/42** (2006.01); **G01S 7/4861** (2020.01); **G01S 7/4865** (2020.01); **G01S 7/487** (2006.01); **G01S 7/493** (2006.01); **G01S 7/499** (2006.01); **G01S 17/18** (2020.01); **G01S 17/931** (2020.01)

CPC (source: EP US)  
**G01S 7/4861** (2013.01 - EP); **G01S 7/4865** (2013.01 - EP); **G01S 7/4876** (2013.01 - EP); **G01S 7/493** (2013.01 - EP); **G01S 7/499** (2013.01 - EP US); **G01S 17/18** (2020.01 - US); **G01S 17/42** (2013.01 - EP US); **G01S 17/931** (2020.01 - EP)

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DOCDB simple family (publication)  
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**DE 102017204586 A 20170320**; CN 201880019731 A 20180319; EP 18712567 A 20180319; EP 2018056843 W 20180319; JP 2019551546 A 20180319; US 201816494986 A 20180319