

Title (en)

LIGHT DETECTION AND RANGING SENSOR

Title (de)

LICHTDETEKTIONS- UND ENTFERNUNGSMESSESENSOR

Title (fr)

CAPTEUR DE DÉTECTION DE LUMIÈRE ET DE TÉLÉMÉTRIE

Publication

EP 3391076 A1 20181024 (EN)

Application

EP 16813340 A 20161208

Priority

- US 201514975790 A 20151220
- US 201662353588 P 20160623
- US 2016065472 W 20161208

Abstract (en)

[origin: WO2017112416A1] An electro-optical device (18) includes a laser light source (20), which emits at least one beam of light pulses, a beam steering device (24), which transmits and scans the at least one beam across a target scene (22), and an array (28) of sensing elements (44). Each sensing element outputs a signal indicative of a time of incidence of a single photon on the sensing element. Light collection optics (27) image the target scene scanned by the transmitted beam onto the array. Circuitry (50) is coupled to actuate the sensing elements only in a selected region (70) of the array and to sweep the selected region over the array in synchronization with scanning of the at least one beam.

IPC 8 full level

G01S 7/481 (2006.01); **G01S 7/4863** (2020.01); **G01S 17/10** (2020.01); **G01S 17/42** (2006.01); **G01S 17/894** (2020.01)

CPC (source: CN EP)

G01S 7/4817 (2013.01 - CN EP); **G01S 7/4863** (2013.01 - CN EP); **G01S 17/10** (2013.01 - CN EP); **G01S 17/42** (2013.01 - CN EP); **G01S 17/89** (2013.01 - CN); **G01S 17/894** (2020.01 - EP)

Citation (search report)

See references of WO 2017112416A1

Designated contracting state (EPC)

AL 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 RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

WO 2017112416 A1 20170629; CN 108431626 A 20180821; CN 108431626 B 20220617; CN 111239708 A 20200605; CN 111239708 B 20240109; EP 3391076 A1 20181024; JP 2018537680 A 20181220; JP 2020073901 A 20200514; JP 6644892 B2 20200212; JP 6899005 B2 20210707

DOCDB simple family (application)

US 2016065472 W 20161208; CN 201680074428 A 20161208; CN 202010063812 A 20161208; EP 16813340 A 20161208; JP 2018530709 A 20161208; JP 2020001203 A 20200108