

Title (en)

DEVICE FOR OPTICALLY MEASURING THE DISTANCE FROM A REFLECTIVE TARGET OBJECT

Title (de)

VORRICHTUNG ZUR OPTISCHEN DISTANZMESSUNG ZU EINEM REFLEKTIERENDEN ZIELOBJEKT

Title (fr)

DISPOSITIF DE MESURE OPTIQUE DE LA DISTANCE À LAQUELLE SE TROUVE UN OBJET CIBLE RÉFLÉCHISSANT

Publication

EP 3298427 A1 20180328 (DE)

Application

EP 16725057 A 20160511

Priority

- EP 15167961 A 20150518
- EP 2016060485 W 20160511

Abstract (en)

[origin: CA2985403A1] The invention relates to a device for optically measuring the distance from a reflective target object, comprising a beam source, a detector, a beam-shaping system having an optical transmission system and an optical receiving system, and a laser beam-shaping element (62) which can be arranged in the optical path of the laser beam (51). Said laser beam-shaping element (62) is in the form of a transmission aperture arrangement that has at least one transmission aperture (63), said at least one transmission aperture (63) generating a sub-beam (64) and expanding this sub-beam (64) to one or more opening angles (a1) no smaller than a minimum critical angle of 1.0 mrad.

IPC 8 full level

G01S 7/481 (2006.01); **G01S 17/08** (2006.01)

CPC (source: EP US)

G01S 7/4811 (2013.01 - US); **G01S 7/4814** (2013.01 - EP US); **G01S 17/08** (2013.01 - EP US); **G02B 7/006** (2013.01 - US);
G02B 27/0955 (2013.01 - US); **G02B 27/0988** (2013.01 - US)

Citation (search report)

See references of WO 2016184733A1

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)

EP 3096156 A1 20161123; CA 2985403 A1 20161124; CA 2985403 C 20200407; CN 107636487 A 20180126; CN 107636487 B 20210511;
EP 3298427 A1 20180328; JP 2018514789 A 20180607; JP 6800892 B2 20201216; US 10788581 B2 20200929; US 2018149749 A1 20180531;
WO 2016184733 A1 20161124

DOCDB simple family (application)

EP 15167961 A 20150518; CA 2985403 A 20160511; CN 201680028571 A 20160511; EP 16725057 A 20160511; EP 2016060485 W 20160511;
JP 2017560228 A 20160511; US 201615575299 A 20160511