

Title (en)

ILLUMINATION FOR ZONED TIME-OF-FLIGHT IMAGING

Title (de)

BELEUCHTUNG FÜR GEZONTE FLUGZEITBILDGEBUNG

Title (fr)

ÉCLAIRAGE DESTINÉ À UNE IMAGERIE DE TEMPS DE VOL ZONÉE

Publication

**EP 3914927 A1 20211201 (EN)**

Application

**EP 19839628 A 20191230**

Priority

- US 201916255817 A 20190123
- US 2019068922 W 20191230

Abstract (en)

[origin: WO2020154070A1] A zoned time-of-flight (ToF) arrangement includes a sensor and a steerable light source that produces an illumination beam having a smaller angular extent than the field of view (FoV) of the sensor. The illumination beam is steerable within the sensor's FoV to optionally move through the sensor's FoV or dwell in a particular region of interest. Steering the illumination beam and sequentially generating a depth map of the illuminated region permits advantageous operations over ToF arrangements that simultaneously illuminate the entire sensor's FoV. For example, ambient performance, maximum range, and jitter are improved. Multiple steering alternative configurations are disclosed, including mechanical, electro optical, and electrowetting solutions.

IPC 8 full level

**G01S 7/481** (2006.01); **G01S 7/499** (2006.01); **G01S 17/42** (2006.01); **G01S 17/894** (2020.01)

CPC (source: EP)

**G01S 7/4817** (2013.01); **G01S 7/499** (2013.01); **G01S 17/42** (2013.01); **G01S 17/894** (2020.01)

Citation (search report)

See references of WO 2020154070A1

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