Title (en)

APPARATUS AND METHOD FOR DETERMINING THE RANGE OF REMOTE OBJECTS

Title (de)

VORRICHTUNG UND VERFAHREN ZUR BESTIMMUNG DER ENTFERNUNG FERNER OBJEKTE

Title (fr)

PROCEDE ET DISPOSITIF DE TELEMETRIE

Publication

EP 1316222 A2 20030604 (EN)

Application

EP 01961741 A 20010725

Priority

- US 0123535 W 20010725
- US 22073400 P 20000726

Abstract (en)

[origin: WO0208685A2] Range estimates are made using a passive technique. Light is focussed and then split into multiple beams. These beams are projected onto multiple image sensors, each of which is located at a different optical path length from the focussing system. By measuring the degree to which point objects are blurred on at least two of the image sensors, information is obtained that permits the calculation of the ranges of objects within the field of view of the camera. A unique beamsplitting system permits multiple, substantially identical images to be projected onto multiple image sensors using minimal overall physical distances, thus minimizing the size and weight of the camera. This invention permits ranges to be calculated continuously and in real time, and is suitable for measuring the ranges of objects in both static and nonstatic situations.

IPC 1-7 (main, further and additional classification)

H04N 9/07

IPC 8 full level (invention and additional information)

G01B 11/02 (2006.01); **G01C 3/08** (2006.01); **G02B 9/62** (2006.01); **G02B 13/00** (2006.01)

CPC (invention and additional information)

G02B 9/62 (2013.01); **G01B 11/026** (2013.01); **G01C 3/08** (2013.01); **G02B 13/00** (2013.01); **H04N 13/236** (2018.05); **H04N 13/271** (2018.05)

Designated contracting state (EPC)

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