Title (en)

PIXEL DOMAIN FIELD CALIBRATION OF TRIANGULATION SENSORS

Title (de)

PIXELDOMÄNENFELDKALIBRIERUNG VON TRIANGULATIONSSENSOREN

Title (fr)

ÉTALONNAGE SUR LE TERRAIN DE CAPTEURS À TRIANGULATION DANS LE DOMAINE DES PIXELS

Publication

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Application

EP 22716799 A 20220308

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Abstract (en)

[origin: WO2022192875A1] Apparatus and associated methods relate to a field-adjustable distance sensor configured to translate a transfer function of the sensor by a substantially constant value in a position domain by calibration at one or more known distances. In an illustrative example, the transfer function may correlate multiple distances to corresponding position vectors describing a position of a light signal on a receiver. The receiver may, for example, generate a detection signal corresponding to a position on the receiver of a light signal reflected off a target. A control circuit may, for example, generate a position vector in response to the detection signal. A calibration constant (C) may be generated, for example, as a function of a known distance of the target and position vector. C may be applied, for example, to translate the transfer function in the position domain. Various embodiments may advantageously reduce non-linear error in a distance sensor.

IPC 8 full level

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