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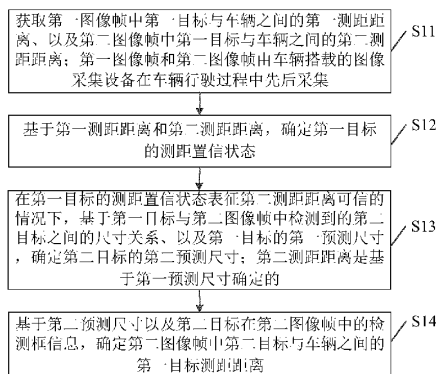
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(54) Title: RANGING METHOD AND APPARATUS, AND DEVICE, VEHICLE, STORAGE MEDIUM AND PROGRAM PRODUCT

(54) 发明名称: 测距方法、装置、设备、车辆、存储介质及程序产品



S11 Acquire a first ranging distance between a first target in a first image frame and a vehicle, and a second ranging distance between the first target in a second image frame and the vehicle, wherein the first image frame and the second image frame are sequentially captured by an image acquisition device mounted on the vehicle during vehicle travel

S12 On the basis of the first ranging distance and the second ranging distance, determine a ranging confidence state of the first target

S13 When the ranging confidence state of the first target indicates that the second ranging distance is credible, determine a second predicted size of a second target on the basis of a size relationship between the first target and the second target detected in the second image frame and a first predicted size of the first target, wherein the second ranging distance is determined on the basis of the first predicted size

S14 On the basis of the second predicted size and detection box information of the second target in the second image frame, determine a first target ranging distance between the second target in the second image frame and the vehicle

(57) Abstract: A ranging method, comprising: acquiring a first ranging distance between a first target in a first image frame and a vehicle, and a second ranging distance between the first target in a second image frame and the vehicle (S11); on the basis of the first ranging distance and the second ranging distance, determining a ranging confidence state of the first target (S12); when the ranging confidence state of the first target indicates that the second ranging distance is credible, determining a second predicted size of a second target on the basis of a size relationship between the first target and the second target detected in the second image frame and a first predicted size of the first target (S13); and on the basis of the second predicted size and detection box information of the second target in the second image frame, determining a first target ranging distance between the second target in the second image frame and the vehicle (S14). The ranging distance of a second target can be calculated on the basis of a first predicted size of a first target, the ranging of which is relatively credible, thereby reducing the ranging error of the second target. Further provided are a ranging apparatus, a device, a vehicle, a storage medium, and a program product.

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SE, SG, SK, SL, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ,
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TD, TG)。

本国际公布:

— 包括国际检索报告(条约第21条(3))。

(57) 摘要: 一种测距方法, 包括获取第一图像帧中第一目标与车辆之间的第一测距距离、第二图像帧中第一目标与车辆之间的第二测距距离 (S11); 基于第一测距距离和第二测距距离, 确定第一目标的测距置信状态 (S12); 在第一目标的测距置信状态表征第二测距距离可信的情况下, 基于第一目标与第二图像帧中检测到的第二目标之间的尺寸关系、第一目标的第一预测尺寸, 确定第二目标的第二预测尺寸 (S13); 基于第二预测尺寸以及第二目标在第二图像帧中的检测框信息, 确定第二图像帧中第二目标与车辆之间的第一目标测距距离 (S14)。能够基于测距较可信的第一目标的第一预测尺寸推算第二目标的测距距离, 降低第二目标的测距误差。还提供一种测距装置、设备、车辆、存储介质及程序产品。