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清(CHENG, Xingqing); 中国广东省深圳市龙岗区坂田华为总部办公楼, Guangdong 518129 (CN)。

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(74) 代理人: 广州三环专利商标代理有限公司 (SCIHEAD IP LAW FIRM); 中国广东省广州市越秀区先烈中路 80 号汇华商贸大厦 1508 室, Guangdong 510070 (CN)。

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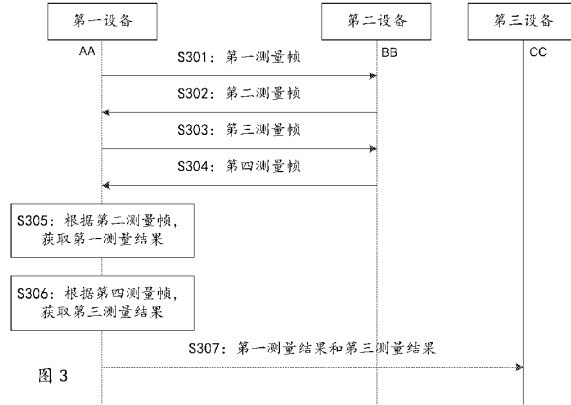
(71) 申请人: 华为技术有限公司 (HUAWEI TECHNOLOGIES CO., LTD.) [CN/CN]; 中国广东省深圳市龙岗区坂田华为总部办公楼, Guangdong 518129 (CN)。

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(72) 发明人: 高磊(GAO, Lei); 中国广东省深圳市龙岗区坂田华为总部办公楼, Guangdong 518129 (CN)。李德建(LI, Dejian); 中国广东省深圳市龙岗区坂田华为总部办公楼, Guangdong 518129 (CN)。程型

(54) Title: DISTANCE MEASUREMENT METHOD AND RELATED APPARATUS

(54) 发明名称: 一种测距方法及相关装置



S301 FIRST MEASUREMENT RESULT
S302 SECOND MEASUREMENT RESULT
S303 THIRD MEASUREMENT RESULT
S304 FOURTH MEASUREMENT RESULT
S305 ACQUIRE A FIRST MEASUREMENT RESULT ACCORDING TO THE SECOND MEASUREMENT FRAME
S306 ACQUIRE A THIRD MEASUREMENT RESULT ACCORDING TO THE FOURTH MEASUREMENT FRAME
S307 FIRST MEASUREMENT RESULT AND THIRD MEASUREMENT RESULT
AA FIRST DEVICE
BB SECOND DEVICE
CC THIRD DEVICE

(57) Abstract: A distance measurement method and a related apparatus, relating to the technical field of communications. The distance measurement method comprises: a first device sending a first measurement frame to a second device on a first frequency point (S301); receiving, on the first frequency point, a second measurement frame sent by a second device (S302); the first device sending a third measurement frame to the second device on a second frequency point (S303), and receiving, on the second frequency point, a fourth measurement frame sent by the second device (S304), wherein the second frequency point is different from the first frequency point; the

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AZ, BY, KG, KZ, RU, TJ, TM), 欧洲 (AL, AT, BE, BG,
CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU,
IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO,
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GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG)。

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first device acquiring a first measurement result according to the second measurement frame (S305); the first device acquiring a third measurement result according to the fourth measurement frame (S306); the first device sending the first measurement result and the third measurement result to a third device (S307). According to the method, the joint measurement result based on the first frequency point and the joint measurement result of the second frequency point are not influenced by the random initial phase caused by a device switching frequency points, coherent merging can be achieved, the distance measurement result can be calculated by using a bandwidth greater than a measurement frame bandwidth of a single frequency point, and the distance measurement precision is improved.

(57) 摘要: 一种测距方法及相关装置, 涉及通信技术领域。该测距方法包括: 第一设备在第一频点上向第二设备发送第一测量帧 (S301), 在第一频点上接收第二设备发送的第二测量帧 (S302); 第一设备在第二频点上向第二设备发送第三测量帧 (S303), 在第二频点上接收第二设备发送的第四测量帧 (S304); 其中, 第二频点与第一频点不同; 第一设备根据第二测量帧, 获取第一测量结果 (S305); 第一设备根据第四测量帧, 获取第三测量结果 (S306); 第一设备向第三设备发送第一测量结果和第三测量结果 (S307)。该方法基于第一频点的联合测量结果和第二频点的联合测量结果不受设备切换频点导致的随机初相的影响, 可以相干合并, 可以使用比单个频点的测量帧带宽更大的带宽计算测距结果, 提高测距精度。