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- (81) 指定国(除另有指明, 要求每一种可提供的国家保护): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU,

(54) Title: UWB-BASED PPDU TRANSMISSION METHOD AND APPARATUS

(54) 发明名称: 基于UWB的PPDU传输方法及装置

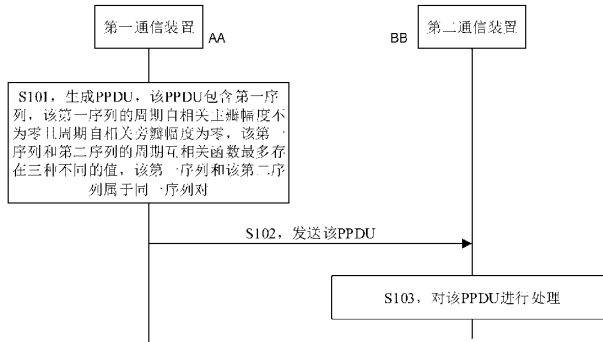


图 6

- AA First communication apparatus
BB Second communication apparatus
S101 Generate a PPDU, which includes a first sequence, wherein a periodic autocorrelation mainlobe amplitude of the first sequence is not zero, but a periodic autocorrelation sidelobe amplitude thereof is zero, and a periodic cross-correlation function between the first sequence and a second sequence has at most three different values, the first sequence and the second sequence belonging to the same sequence pair
S102 Send the PPDU
S103 Process the PPDU

(57) Abstract: The present application relates to a UWB-based PPDU transmission method and apparatus. The method comprises: two communication parties exchanging a PPDU, which includes a first sequence, wherein the first sequence is a ternary perfect sequence, and a periodic cross-correlation function between the first sequence and a second sequence belonging to the same sequence pair has at most three different values. By using the embodiments of the present application, interference between devices can be reduced. The present application is applied to a UWB-based WPAN system, a UWB-based sensing system, etc., each comprising 802.15 series protocols such as an 802.15.4ab standard or an 802.15.4ab next-generation standard. The present application can be further applied to

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CV, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IQ, IR, IS, IT, JM, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, MG, MK, MN, MU, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS, ZA, ZM, ZW。

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WLAN systems that support 802.11 series protocols including 802.11ax next-generation Wi-Fi protocols such as 802.11be, Wi-Fi 7 or EHT, and 802.11be next-generation, such as Wi-Fi 8, UHR or Wi-Fi AI.

(57) 摘要: 本申请涉及一种基于UWB的PPDU传输方法及装置, 该方法包括: 通信双方交互PPDU, 该PPDU中包含第一序列, 第一序列是三元完备序列且第一序列和同属于一个序列对的第二序列的周期互相关函数最多存在三种不同的值。采用本申请实施例, 可以减少设备间的干扰。本申请应用于基于UWB的WPAN系统、感知系统等, 包括802.15系列协议, 如802.15.4ab制式或者802.15.4ab下一代制式等。还可应用于支持802.11ax下一代Wi-Fi协议, 如802.11be, Wi-Fi 7或EHT, 再如802.11be下一代, Wi-Fi 8、UHR、Wi-Fi AI等802.11系列协议的WLAN系统。