

(12) 按照专利合作条约所公布的国际申请

(19) 世界知识产权组织
国际局



(10) 国际公布号
WO 2023/206562 A1

(43) 国际公布日
2023 年 11 月 2 日 (02.11.2023)

(51) 国际专利分类号:
H04W 72/04 (2009.01)

(21) 国际申请号: PCT/CN2022/090770

(22) 国际申请日: 2022 年 4 月 29 日 (29.04.2022)

(25) 申请语言: 中文

(26) 公布语言: 中文

(71) 申请人: 北京小米移动软件有限公司 (BEIJING XIAOMI MOBILE SOFTWARE CO., LTD.) [CN/CN]; 中国北京市海淀区西二旗中路 33 号院 6 号楼 8 层 018 号, Beijing 100085 (CN)。

(72) 发明人: 朱亚军 (ZHU, Yajun); 中国北京市海淀区西二旗中路 33 号院 6 号楼 8 层 018 号, Beijing 100085 (CN)。

(74) 代理人: 北京博思佳知识产权代理有限公司 (BEIJING BESTIPR INTELLECTUAL

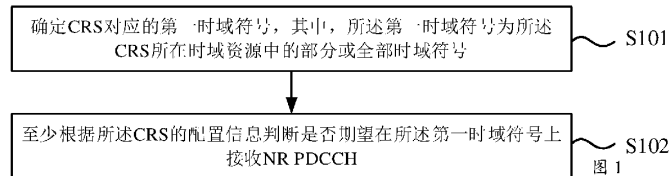
PROPERTY LAW CORPORATION); 中国北京市海淀区上地三街 9 号嘉华大厦 B 座 409, Beijing 100085 (CN)。

(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, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, IT, JM, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, 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。

(84) 指定国(除另有指明, 要求每一种可提供的地区保护): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SC, SD, SL, ST, SZ, TZ, UG, ZM, ZW), 欧亚 (AM,

(54) Title: CONTROL CHANNEL RECEIVING METHOD AND APPARATUS, CONTROL CHANNEL SENDING METHOD AND APPARATUS, AND COMMUNICATION APPARATUS AND STORAGE MEDIUM

(54) 发明名称: 控制信道接收、发送方法和装置、通信装置和存储介质



S101 Determine a first time-domain symbol corresponding to a CRS, wherein the first time-domain symbol is some or all of the time-domain symbols in a time-domain resource where the CRS is located

S102 At least according to configuration information of the CRS, determine whether it is desired to receive an NR PDCCH on the first time-domain symbol

(57) Abstract: The present disclosure relates to a control channel receiving method and apparatus, a control channel sending method and apparatus, and a communication apparatus and a storage medium. The control channel receiving method comprises: determining a first time-domain symbol corresponding to a cell-specific reference signal (CRS); and at least according to configuration information of the CRS, determining whether it is desired to receive a new radio physical downlink control channel (NR PDCCH) on the first time-domain symbol. According to the present disclosure, a terminal can determine a first time-domain symbol corresponding to a resource occupied by a CRS, and then determine, according to configuration information of the CRS, whether it is desired to receive an NR PDCCH on the first time-domain symbol. When it is determined that the number of REs occupied by the CRS on the first time-domain symbol is relatively large, the terminal may not expect to receive the NR PDCCH on the first time-domain symbol, and a network device may also not send the NR PDCCH to the terminal on the first time-domain symbol, thereby avoiding unnecessary consumption caused by the terminal receiving an NR PDCCH on a time-domain symbol for which the NR PDCCH corresponds to relatively few REs.

[见续页]

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, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG)。

本国际公布:

— 包括国际检索报告(条约第21条(3))。

(57) 摘要: 本公开涉及控制信道接收、发送方法和装置、通信装置和存储介质, 其中, 所述控制信道接收方法包括: 确定小区专属参考信号CRS对应的第一时域符号; 至少根据所述CRS的配置信息判断是否期望在所述第一时域符号上接收新空口物理下行控制信道NR PDCCH。根据本公开, 终端可以确定CRS占用资源对应的第一时域符号, 进而根据CRS的配置信息判断是否期望在第一时域符号上接收NR PDCCH。在确定在第一时域符号上CRS占用的RE数目相对较多时, 终端可以不期望在第一时域符号上接收NR PDCCH, 网络设备也不会第一时域符号上向终端发送NR PDCCH, 从而避免终端在NR PDCCH对应RE相对较少的时域符号上接收NR PDCCH而造成不必要的消耗。