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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, 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, 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。
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(54) Title: UPLINK CONTROL INFORMATION MULTIPLEXING METHOD AND APPARATUS

(54) 发明名称: 一种上行控制信息的复用方法及其装置

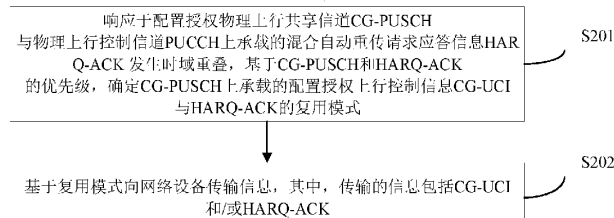


图 2

- S201 In response to occurrence of overlapping in time domain between a configure grant-physical uplink share channel (CG-PUSCH) and a hybrid automatic repeat request-acknowledgement (HARQ-ACK) carried on a physical uplink control channel (PUCCH), determine, on the basis of the priority of the CG-PUSCH and the HARQ-ACK, a multiplexing mode for the CG-PUSCH and the HARQ-ACK
- S202 Transmit information to a network device on the basis of the multiplexing mode, the transmitted information comprising the CG-UCI and/or the HARQ-ACK

(57) Abstract: The present application relates to an uplink control information (UCI) multiplexing method and apparatus. Embodiments of the present application provide a UCI multiplexing method. In response to occurrence of overlapping in time domain between a CG-PUSCH and a HARQ-ACK carried on a PUCCH, a multiplexing mode for CG-UCI carried on the CG-PUSCH and the HARQ-ACK can be determined on the basis of the priority of the CG-PUSCH and the HARQ-ACK; the CG-UCI and/or the HARQ-ACK are/is transmitted to a network device on the basis of the multiplexing mode. The present application is applied to the scenario that overlapping in time domain occurs between a CG-PUSCH and a HARQ-ACK carried on a PUCCH over an unlicensed band. The multiplexing transmission of the CG-PUSCH and the HARQ-ACK can be achieved over the unlicensed band according to the priority of the CG-PUSCH and the HARQ-ACK, such that the transmission latency and reliability of UCI in a URLLC service can be ensured.

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NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW), 欧亚 (AM, 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：**本申请涉及一种上行控制信息的复用方法及其装置。其中，本申请实施例提供了一种上行控制信息的复用方法，通过响应于CG-PUSCH与PUCCH上承载的HARQ-ACK发生时域重叠，可以基于CG-PUSCH和HARQ-ACK的优先级，确定CG-PUSCH上承载的CG-UCI与HARQ-ACK的复用模式，基于复用模式，将CG-UCI和/或HARQ-ACK传输至网络设备。本申请应用于非授权频段上CG-PUSCH与PUCCH上承载的HARQ-ACK发生时域重叠的场景下，能够根据CG-PUSCH和HARQ-ACK的优先级，在非授权频段实现CG-PUSCH和HARQ-ACK的复用传输，进而可以能够保证URLLC业务中UCI的传输时延和可靠性。